KEEBOX

User's Guide

KView Wireless N Internet Camera
IPC1000W

KView Wireless N Day/Night Internet Camera
IPC1000WI

1.01

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Product Overview

Package Contents

- IPC1000W/IPC1000WI KView Wireless N Network Camera/ KView Day/Night Wireless N Network Camera
- CD-ROM (Utility & User's Guide)
- Multi-Language Quick Installation Guide
- Network Cable
- Power Adapter
- Camera Stand

If any of the above items are missing from your package, please contact your reseller.

System Requirements

- Computer with Microsoft Windows® 7, XP®, Vista®
- 1.3GHz Intel Pentium® 1.3GHz or equivalent AMD Athlon® processor
- 128MB RAM
- Internet Explorer 6, Firefox 3.5, Safari 4
- Existing 10/100 Ethernet-based network or 802.11n wireless network

Introduction

Congratulations on your purchase of the Keebox IPC1000W/IPC1000WI KView Wireless N Network Camera. The IPC1000W/IPC1000WI is the perfect solution for your small office or home monitoring needs. Unlike common webcams, the IPC1000W/IPC1000WI is a complete unit which can operate without relying on an attached computer as it has its own integrated CPU. Once connected to your network, you can access images or video from your camera remotely, whether it is through your internal network or over the Internet. The included setup wizard and web-based administration tool provides a simple and intuitive way to configure and use your network camera over your existing 10/100 Ethernet network or over Wi-Fi using the built-in 802.11n support.

Features

Easy Installation

The IPC1000W/IPC1000WI includes a CD-ROM with a setup wizard that guides you through the process of installation and to get you using your network camera within minutes.

Wide Platform Support

Supporting TCP/IP networking, HTTP, and other Internet related protocols. The IPC1000W/IPC1000WI can also be integrated easily into other Internet/Intranet applications because of its standards-based features.

802.11n and 10/100 Ethernet Support

The IPC1000W/IPC1000WI supports both 802.11n and 10/100 Ethernet giving you the flexibility to choose whether to use it wired or mount it in a spot where you don't have an Ethernet port, thereby avoiding the need for ugly cables.

Web Configuration

Once installed, administrators can use a standard web browser to access images and video or configure the camera over an intranet or over the Internet. This means you can access the camera from anywhere in the world.

Broad Range of Applications

With today's high-speed Internet connections, many applications for your network camera exist, including industrial and public monitoring of homes, offices, banks, hospitals, child-care centers and amusement parks.

Day/Night Mode (IPC1000WI Model only)

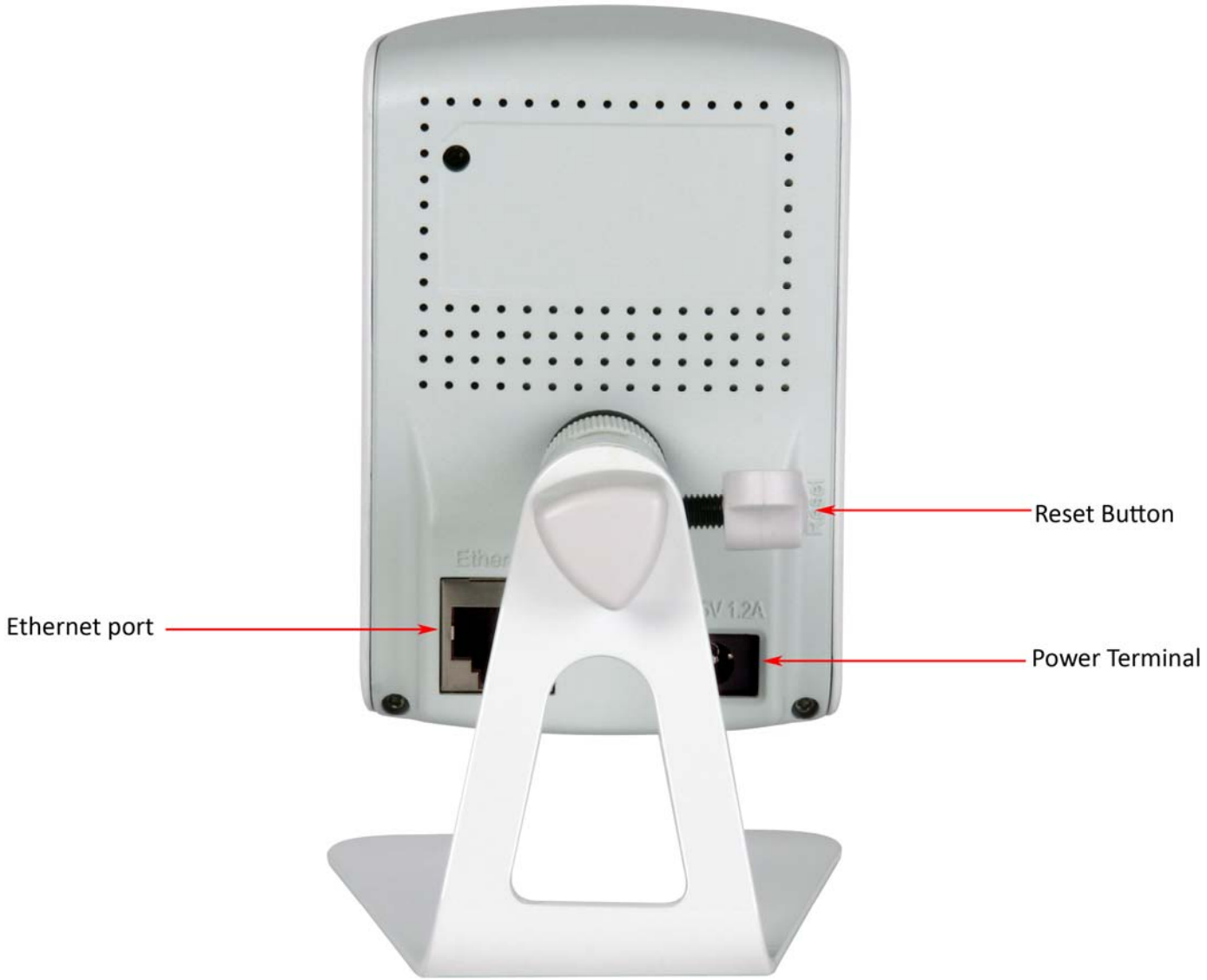
The IPC1000WI is equipped with LEDs at the front to provide better vision in dark locations or in outdoor locations where the image will be required at both day and night.

Hardware Overview (IPC1000W)

Front View

Hardware Overview (IPC1000W)

Rear View



Hardware Overview (IPC1000W)

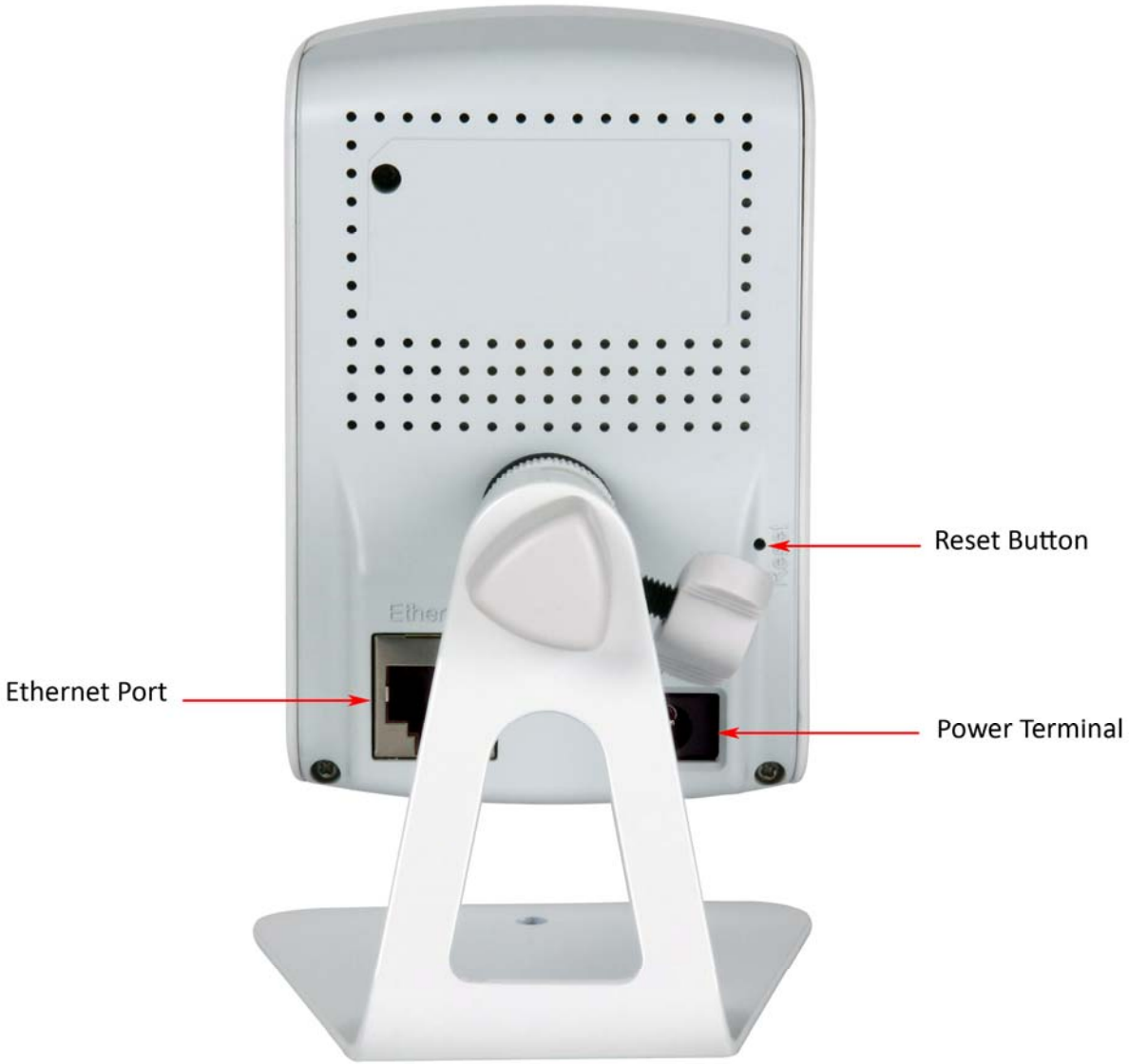
Left Side View

Hardware Overview (IPC1000WI)

Front View

Hardware Overview (IPC1000WI)

Rear View



Hardware Overview (IPC1000WI)

Left Side View

Installation

Hardware Installation

Connect the Ethernet Cable

If you intend to use the network camera as a wired device, connect one end of the included Ethernet cable into the **Ethernet** port on the rear panel of the camera and connect the other end to an available port on your network. If you prefer to use the camera on a wireless network, see below for instructions on connecting the power adapter.

Attach the Power Supply

Attach the included power supply to the **DC 5V 1.2A** receptor on the rear panel of the camera and then connect it to a wall outlet or power strip. A blue LED will light up above the lens indicating that the camera has power.

Wireless Installation Considerations

The Keebox IPC1000W / IPC1000WI KView Wireless N Network Camera can be connected to your network wirelessly from anywhere within its operating range. However, keep in mind that there are factors that affect the signal strength and range of your connection. The number of objects the signal must pass through together with the number of radio frequencies in the area will have an effect on the range. Remember these tips to maximize the wireless range of your network:

- Keep the number of walls or ceilings that the signal must pass through to a minimum. Each wall or ceiling that the signal must pass through will have an adverse affect on the range of your network.
- Be aware of the direct line between the devices. A wall that is at an angle will mean that signal needs to pass through a greater surface area than the normal thickness of the wall.
- Building materials make a difference. Try to position access points, routers and computers so that the signal passes through open doorways or through drywall. Materials such as glass, metal, steel, walls with insulation, bodies of water such as fish tanks, mirrors, file cabinets, brick and concrete will degrade your wireless signal.
- Keep the network camera at least 3-6 feet (1-2 meters) away from other devices which generate radio frequencies.
- If you are using a 2.4GHz cordless phone or other radio frequency sources such as microwave ovens, your wireless signal may degrade or drop completely. Try to keep the base station of your cordless phone as far away as possible from the camera as the base station will transmit a signal even if the phone is not in use.

Starting the Setup Wizard

Insert the included CD-ROM into your CD/DVD drive. The Install Wizard program will run automatically.

Note: If the Install Wizard does not run, you may have autorun disabled on your machine. In this case, browse to the CD drive and run **InstallWizard.exe** to begin the installation wizard.

Begin by selecting **Setup Wizard** and follow the on-screen steps to continue the installation.

When the installation of the Setup Wizard is complete, run the Setup Wizard:

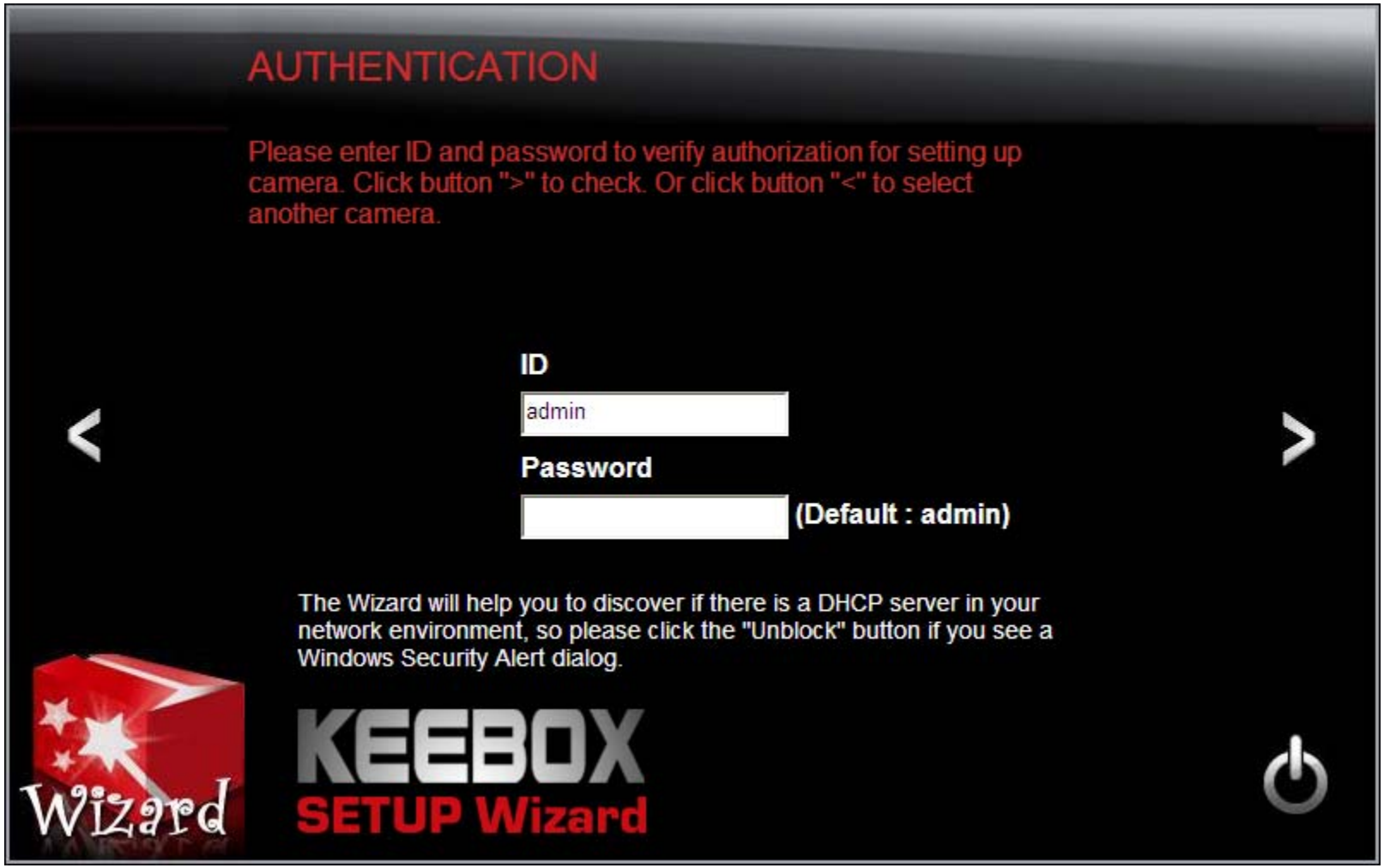
1. Click **Start > Programs > KEEBOX > SetupWizard > SetupWizard.** The KEEBOX Setup Wizard appears.

2. Connect an RJ-45 cable from a switch/router to the Ethernet port on the back of the camera and connect the AC power adapter to the camera. Click the **>** icon to proceed.

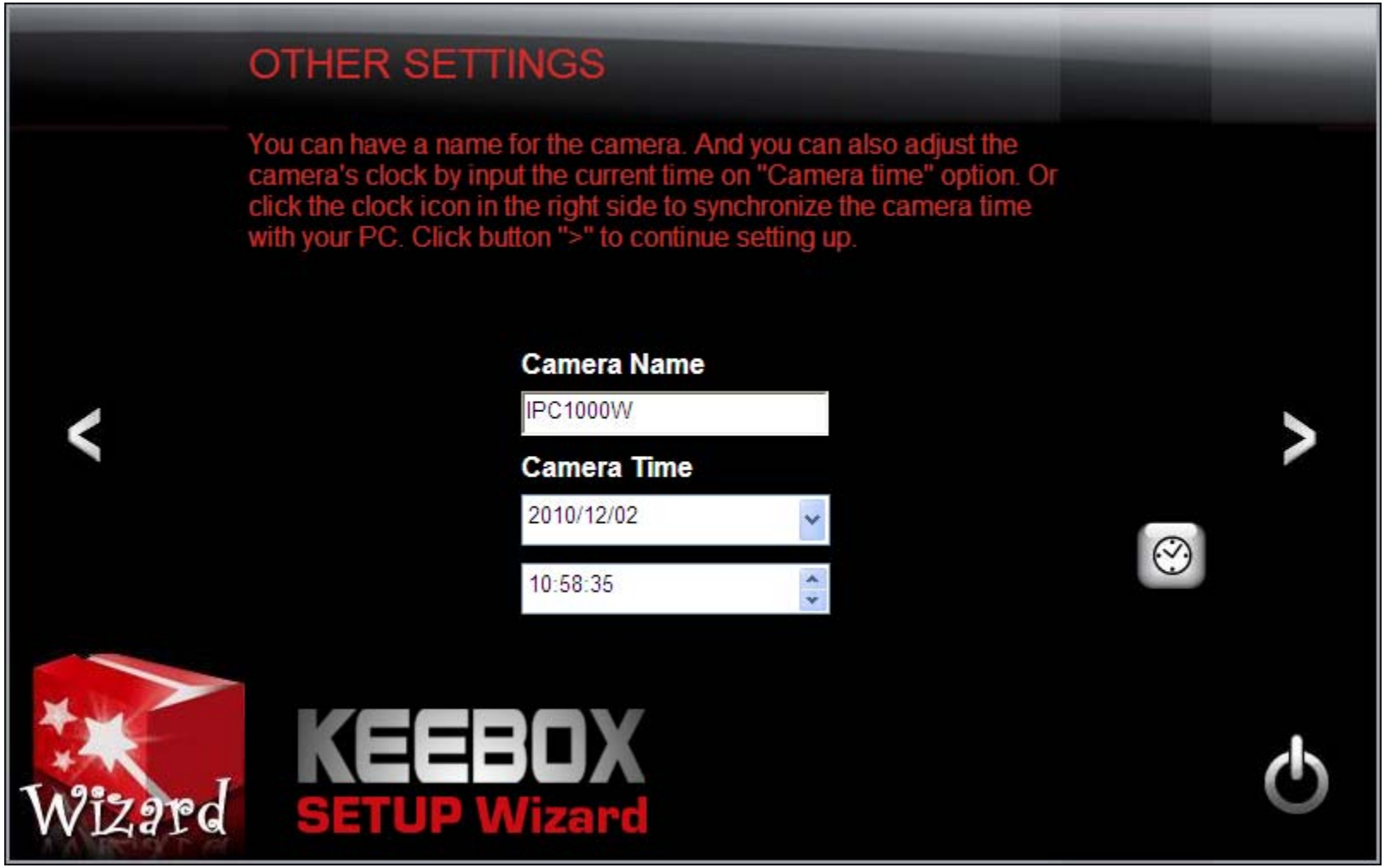
INSTALL YOUR CAMERA
Please connect a RJ-45 network cable from a Switch/Router to the LAN port of the camera and connect the AC Power Adapter to the camera.
Wizard

3. From the list of cameras that appears, select the camera you wish to configure and click the **>** icon to continue. If your camera is not listed, ensure that it is connected to both power and the network and click to re-scan the network for your camera.

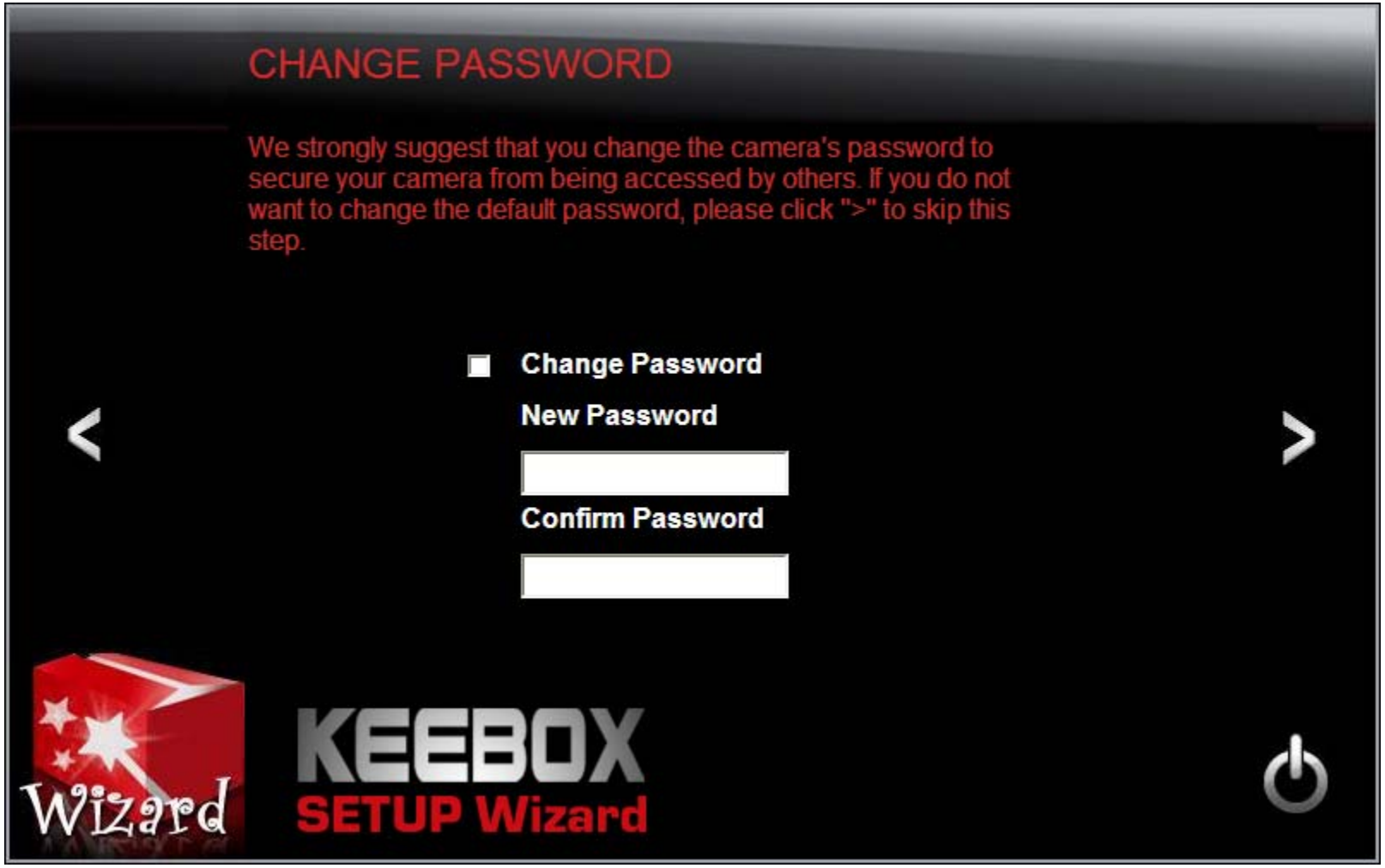
4. Login to your camera by entering the ID and Password. By default, both the ID and Password are set to **admin**. Select the **>** icon to continue.


AUTHENTICATION
Please enter ID and password to verify authorization for setting up camera. Click button ">" to check. Or click button "<" to select another camera.
ID
admin
Password
(Default : admin)
The Wizard will help you to discover if there is a DHCP server in your network environment, so please click the "Unblock" button if you see a Windows Security Alert dialog.
Wizard
KEEBOX
SETUP Wizard

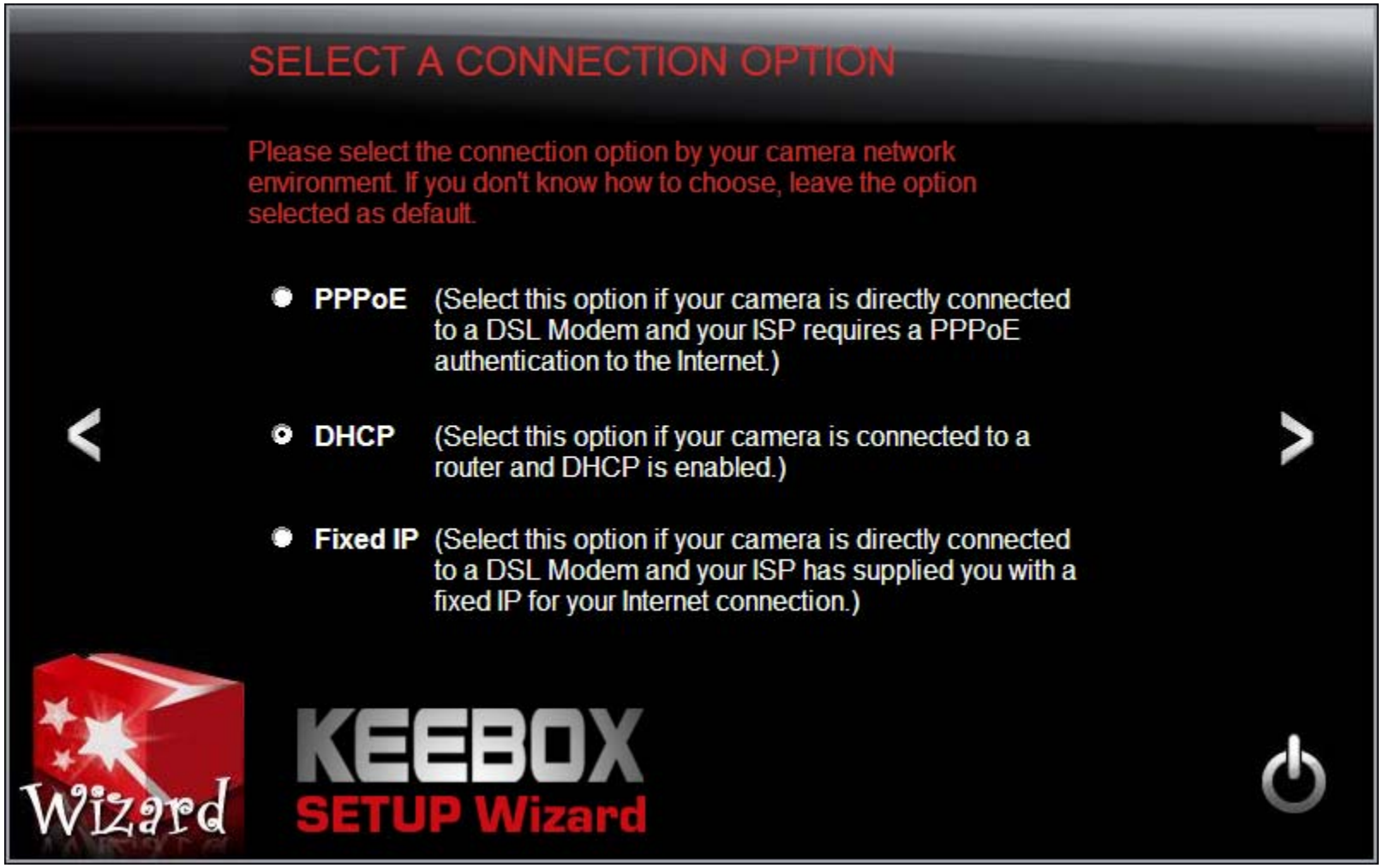
5. Enter a name for the camera in the **Camera Name** field. The name will be used to identify your camera on the network. Enter the correct time for the camera for the time zone it is in. If your camera is in the same time zone as the computer you are using, click the icon to copy the local time to the camera. Click the **>** icon to continue.


OTHER SETTINGS
You can have a name for the camera. And you can also adjust the camera's clock by input the current time on "Camera time" option. Or click the clock icon in the right side to synchronize the camera time with your PC. Click button ">" to continue setting up.
Camera Name
IPC1000W
Camera Time
2010/12/02
10:58:35
Wizard
KEEBOX
SETUP Wizard

6. It is strongly recommended that you change your password to secure the camera from being accessed by others. Check the **Change Password** box and enter the new password in both password fields to confirm the new password. Click the **>** icon to continue.


CHANGE PASSWORD
We strongly suggest that you change the camera's password to secure your camera from being accessed by others. If you do not want to change the default password, please click ">" to skip this step.
Change Password
New Password
Confirm Password
Wizard
KEEBOX
SETUP Wizard

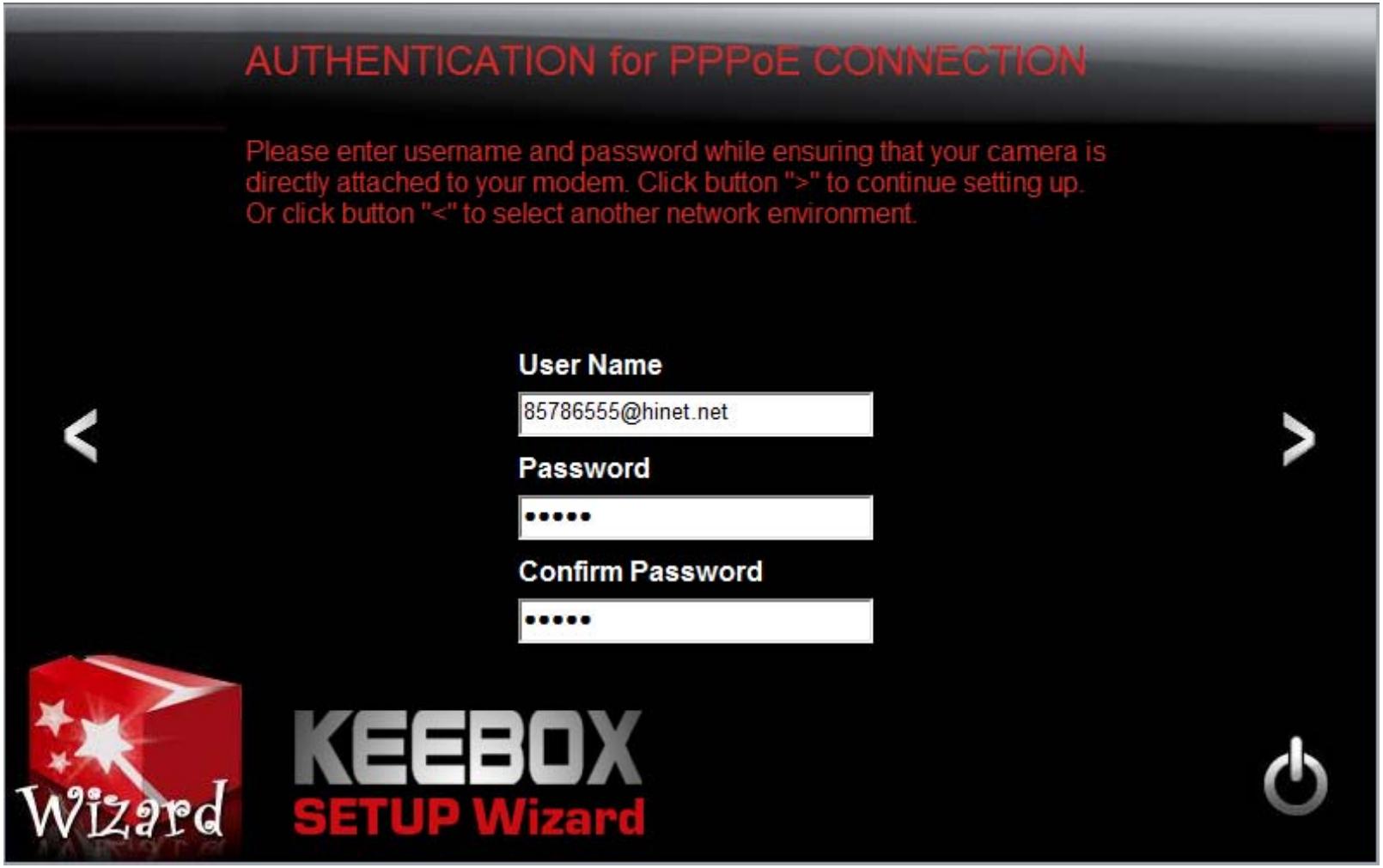
7. Select a connection option:
   PPPoE: Select this option if your camera is directly connected to a DSL modem and your ISP requires a PPPoE authentication to the Internet. Continue on page 18 if you select this option.
   DHCP: Select this option if your camera is connected to a router and DHCP is enabled. Continue on page 25 if you select this option.
   Fixed IP: Select this option if your camera is directly connected to a DSL modem and your ISP has supplied you with a fixed IP for your Internet connection. Continue on page 33 if you select this option.
   Select the radio button for your connection type and click the **>** icon to continue.


SELECT A CONNECTION OPTION
Please select the connection option by your camera network environment. If you don't know how to choose, leave the option selected as default.
PPPoE (Select this option if your camera is directly connected to a DSL Modem and your ISP requires a PPPoE authentication to the Internet.)
DHCP (Select this option if your camera is connected to a router and DHCP is enabled.)
Fixed IP (Select this option if your camera is directly connected to a DSL Modem and your ISP has supplied you with a fixed IP for your Internet connection.)
Wizard
KEEBOX
SETUP Wizard

Connecting with PPPoE

Select the **PPPoE** radio button and click the **>** icon to continue.

Enter your **PPPoE User Name** and **Password** and re-enter the password in the **Confirm Password** field.


AUTHENTICATION for PPPoE CONNECTION
Please enter username and password while ensuring that your camera is directly attached to your modem. Click button ">" to continue setting up.
Or click button "<" to select another network environment.
User Name
85786555@hinet.net
Password
Confirm Password
Wizard
KEEBOX
SETUP Wizard

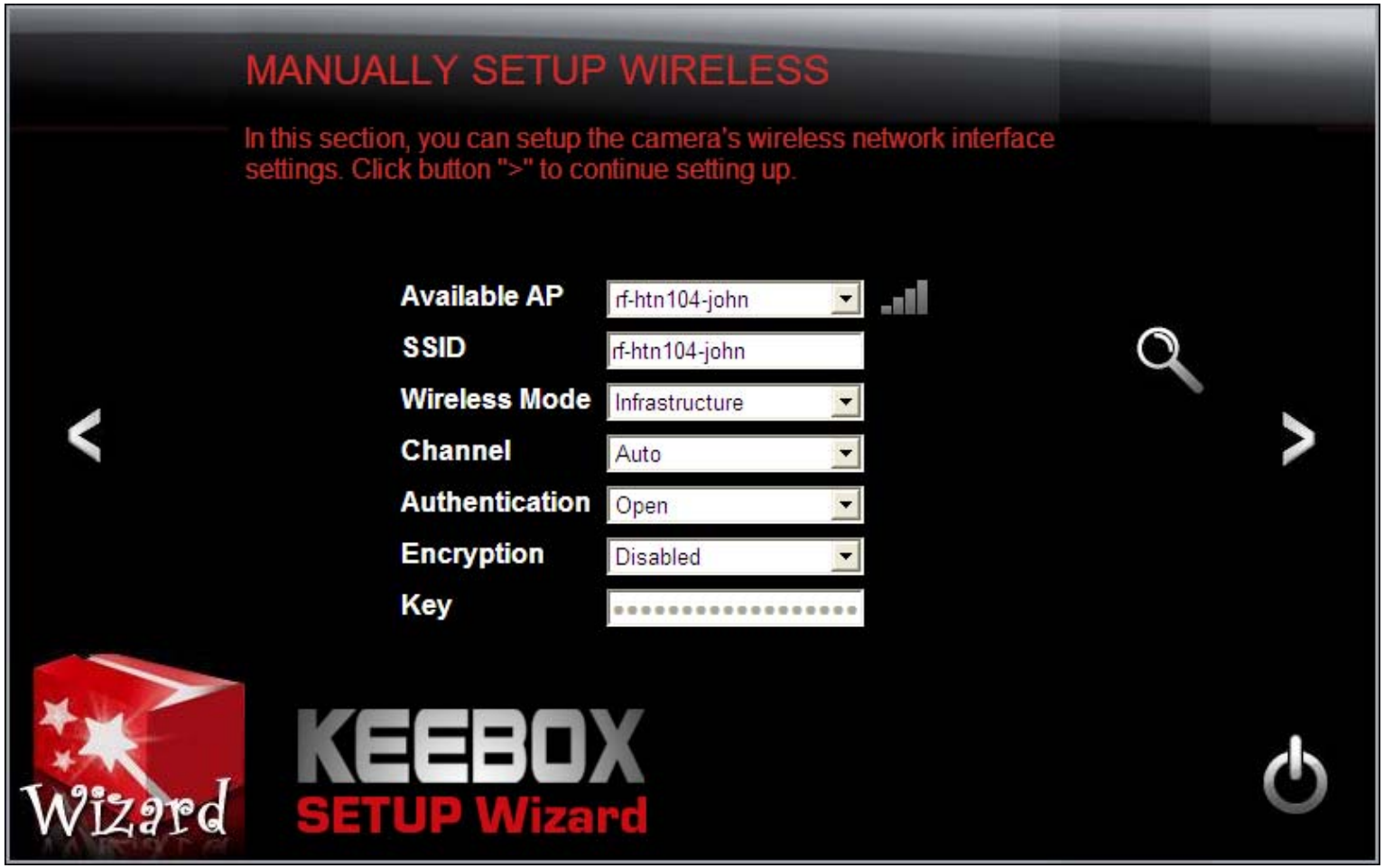
Select whether you want to use the camera over an 802.11n wireless connection or on a wired connection. Click the **>** icon to continue.

SETUP WIRELESS
In this section, you can choose whether use the camera's wireless or not. Click button ">" to continue setting up.
I want to use wireless for the camera.
No, I don't want to use wireless for the camera.
Wizard
KEEBOX
SETUP Wizard

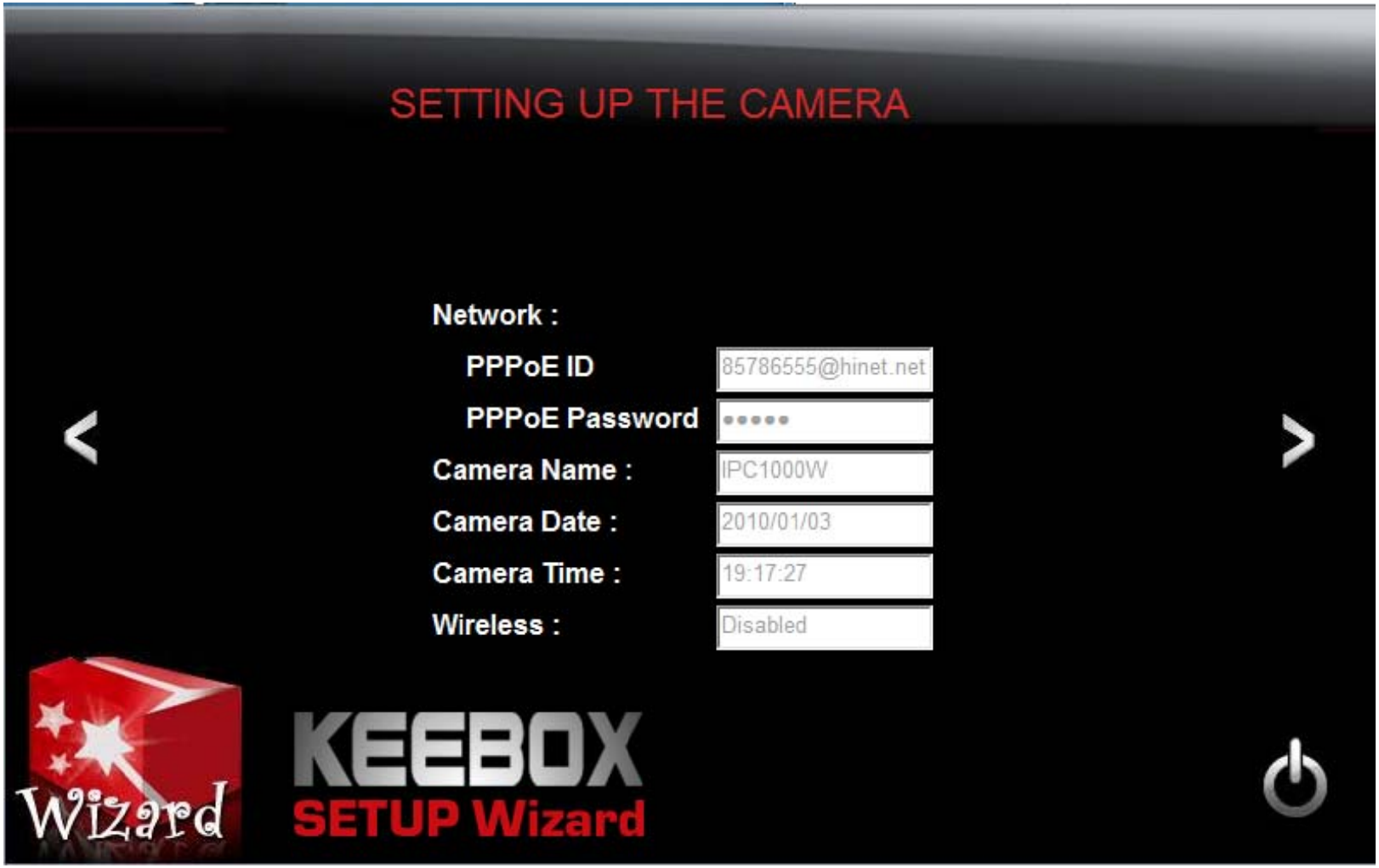
Wireless Connection

- Find the access point (AP) you wish to connect to from the **Available AP** drop down menu. If the AP you want to connect to is not listed, click the icon to re-scan for nearby APs.
- Select the **Wireless Mode**, either Infrastructure or Adhoc.
- In most cases you should leave the **Channel** set to Auto as the AP will determine the channel of operation.
- Select the type of **authentication** and **encryption** required by the access point and enter the **Key** required to connect.

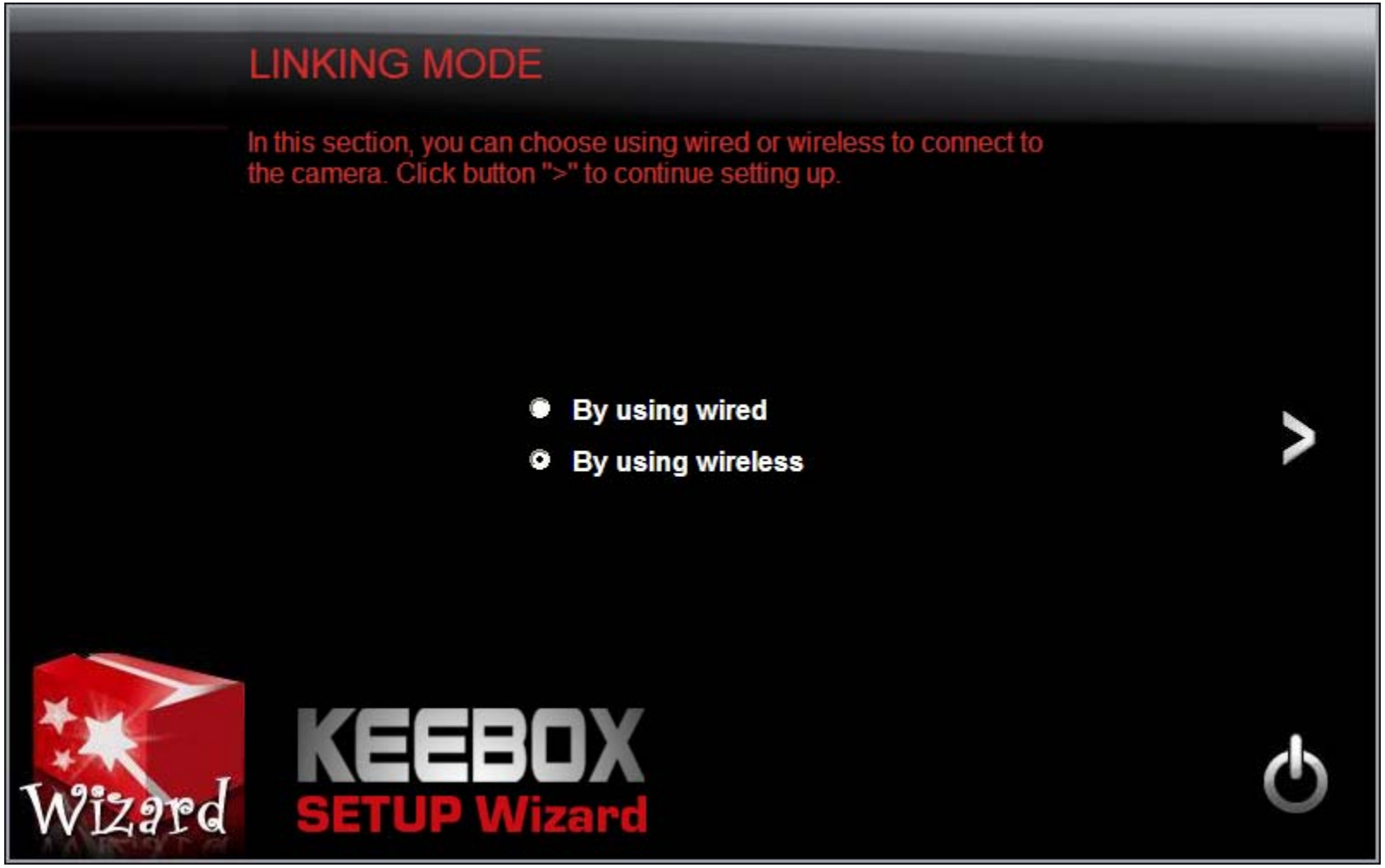
Click the **>** icon to continue.



A summary screen of the settings you have chosen appears. Click the **>** icon to continue.



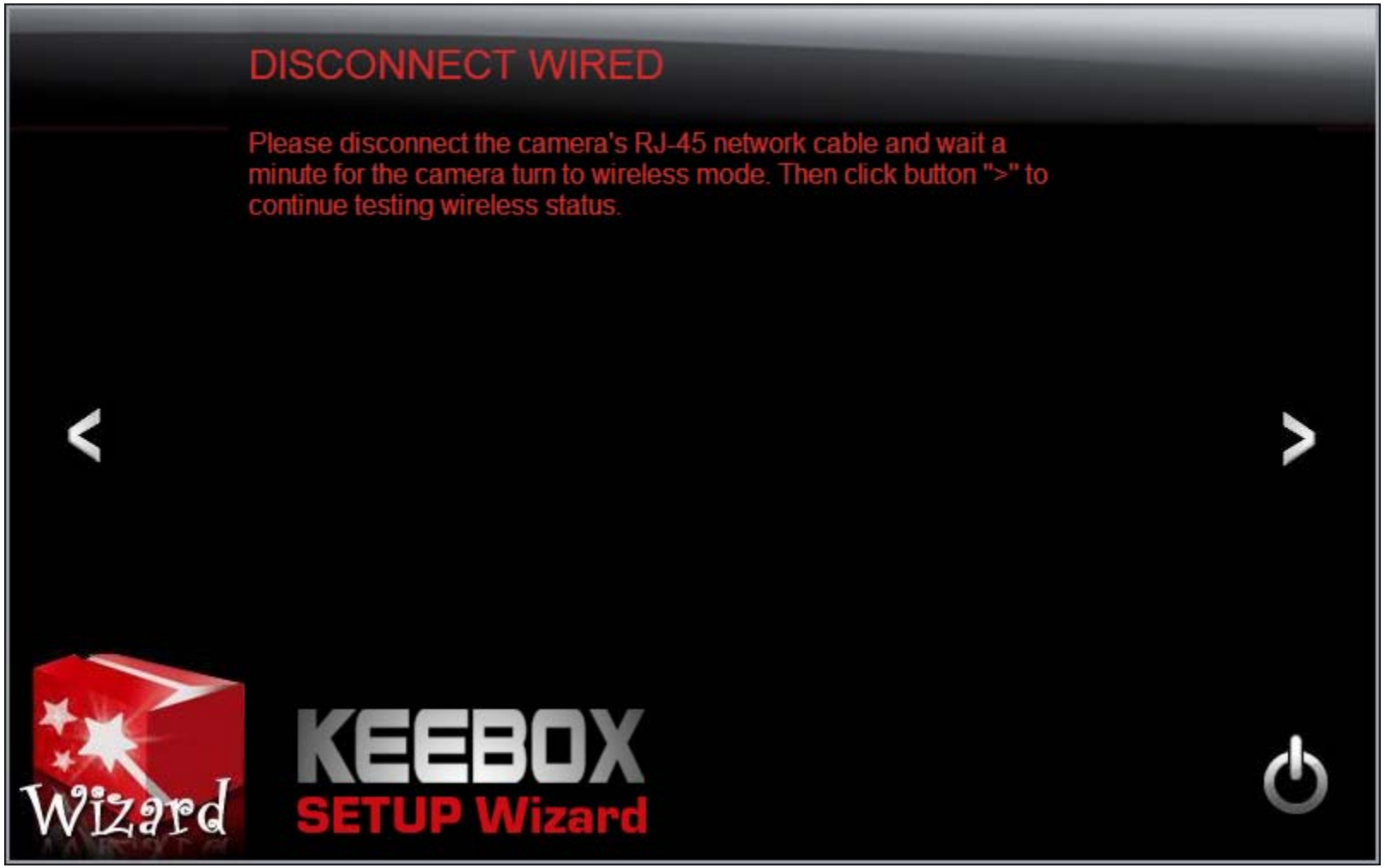
After the Setup Wizard configures the camera, a screen prompting you for the connection method appears.


LINKING MODE
In this section, you can choose using wired or wireless to connect to the camera. Click button ">" to continue setting up.
By using wired
By using wireless
>
Wizard
KEEBOX
SETUP Wizard

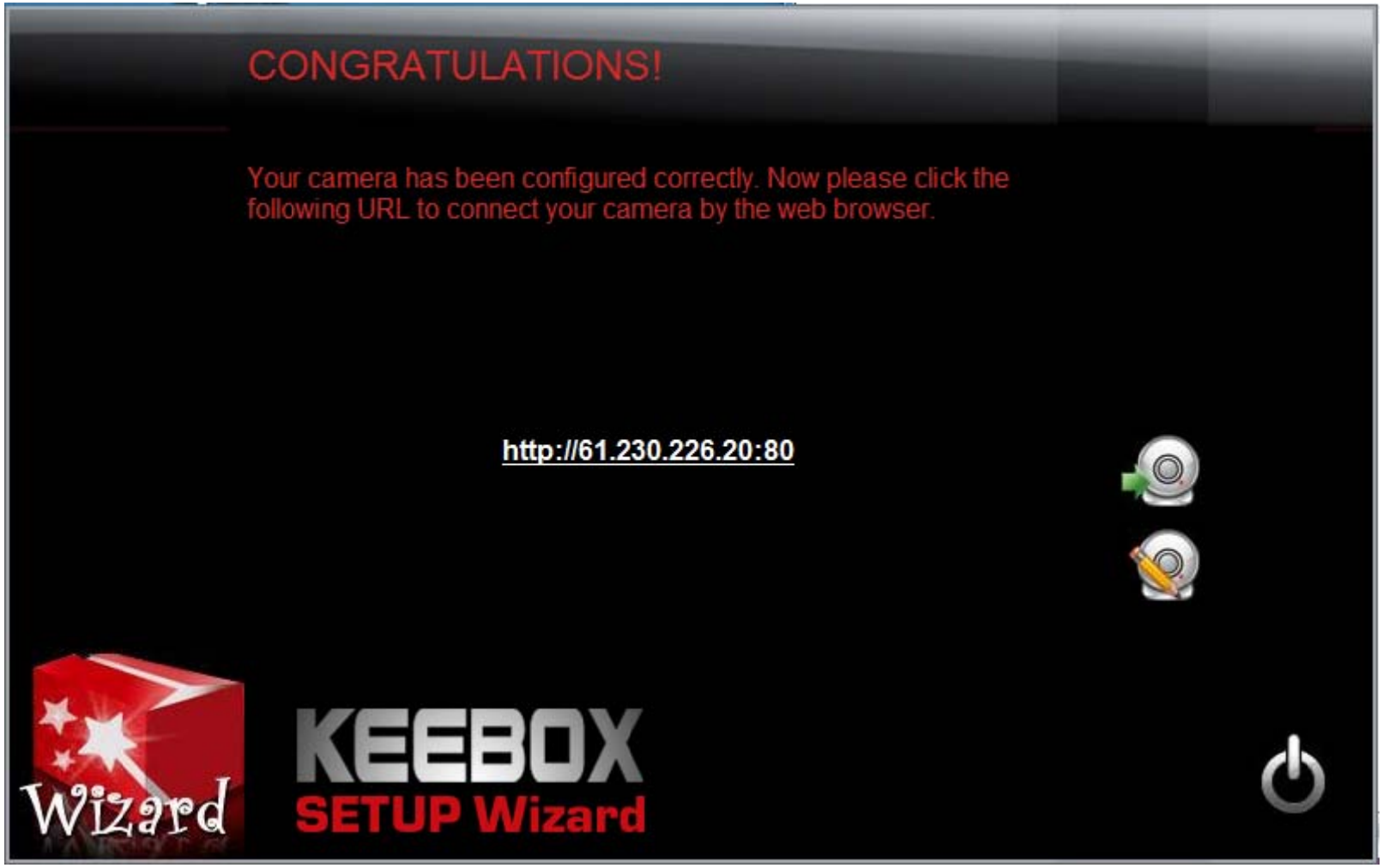
Check the radio button for the method of connection you want to use for your camera and click **>** to continue.

Connecting over wireless

Disconnect the Ethernet cable from the camera and wait for 1 minute for the camera to turn to wireless mode then click the **>** icon to continue.


DISCONNECT WIRED
Please disconnect the camera's RJ-45 network cable and wait a minute for the camera turn to wireless mode. Then click button ">" to continue testing wireless status.
<
>
Wizard
KEEBOX
SETUP Wizard

When the Setup Wizard has finished, the configuration is complete and the following screen appears:


CONGRATULATIONS!
Your camera has been configured correctly. Now please click the following URL to connect your camera by the web browser.
http://61.230.226.20:80
Wizard
KEEBOX
SETUP Wizard

You are now ready to begin using your camera.

Connecting with DHCP

Select the **DHCP** radio button and click the **>** icon to continue.

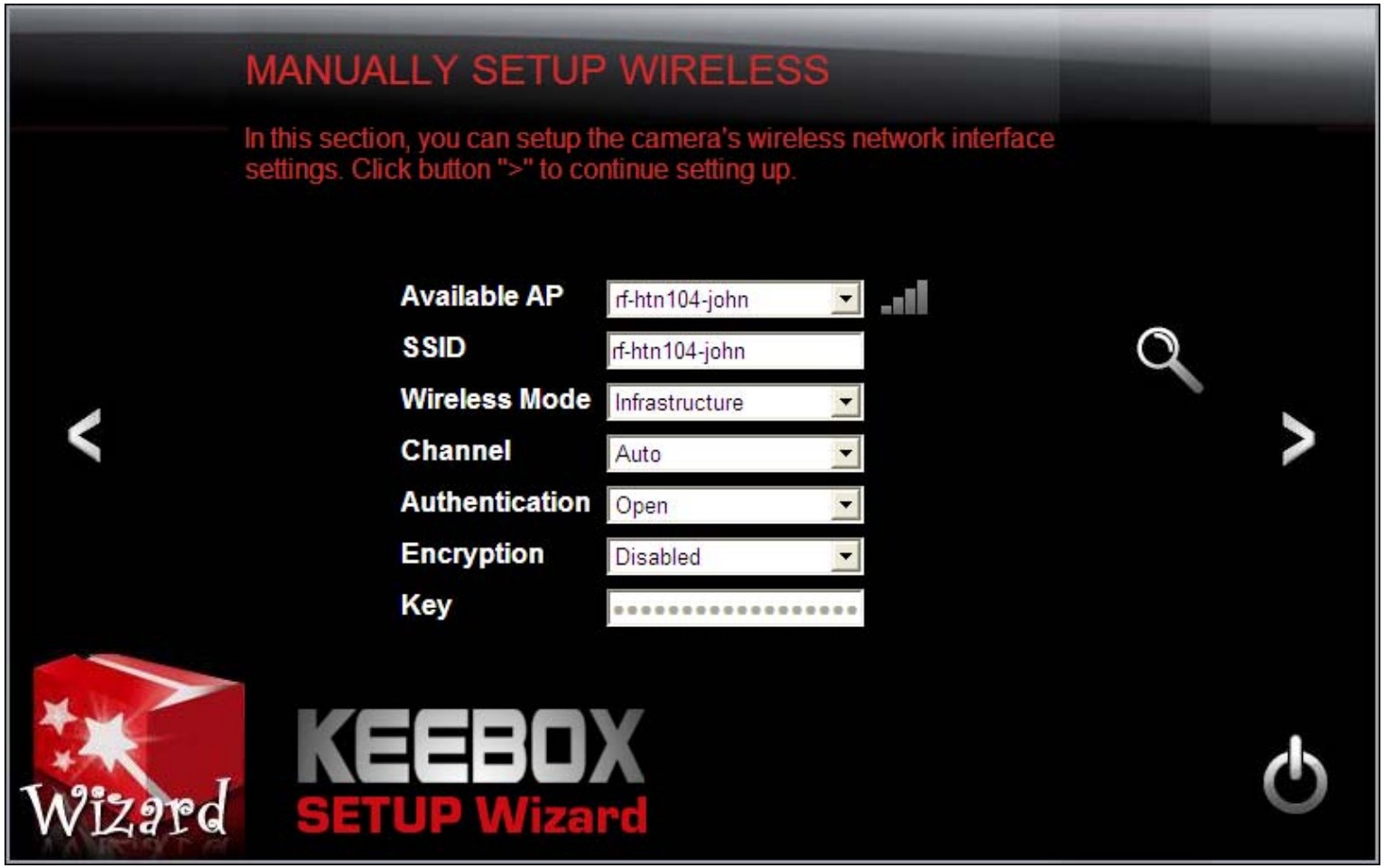
Select whether you want to use the camera over an 802.11n wireless connection or on a wired connection. Click the **>** icon to continue.

SETUP WIRELESS
In this section, you can choose whether use the camera's wireless or not. Click button ">" to continue setting up.
I want to use wireless for the camera.
No, I don't want to use wireless for the camera.
Wizard
KEEBOX
SETUP Wizard

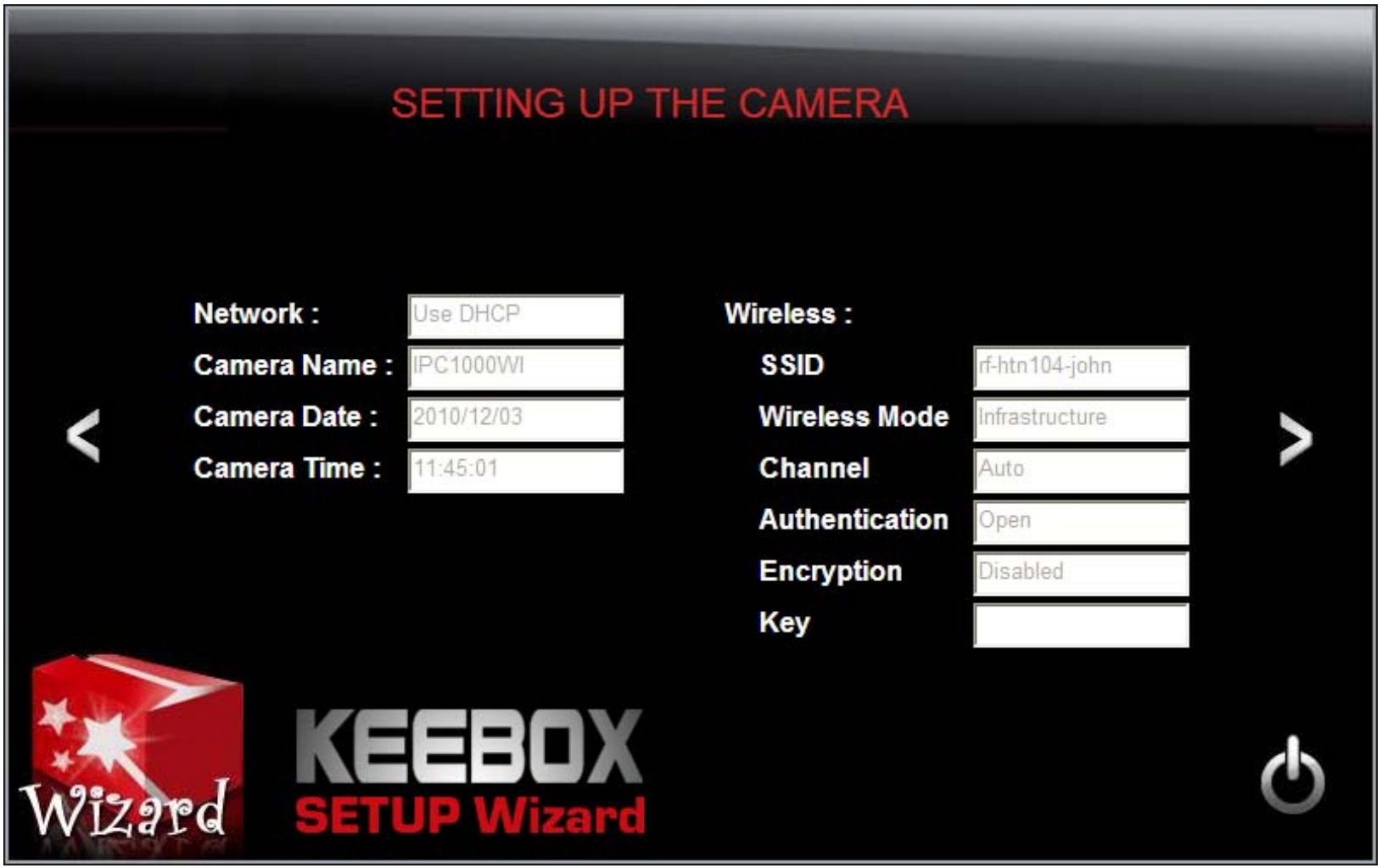
Wireless Connection

- Find the access point (AP) you wish to connect to from the **Available AP** drop down menu. If the AP you want to connect to is not listed, click the icon to re-scan for nearby APs.
- Select the **Wireless Mode**, either Infrastructure or Adhoc.
- In most cases you should leave the **Channel** set to Auto as the AP will determine the channel of operation.
- Select the type of **authentication** and **encryption** required by the access point and enter the **Key** required to connect.

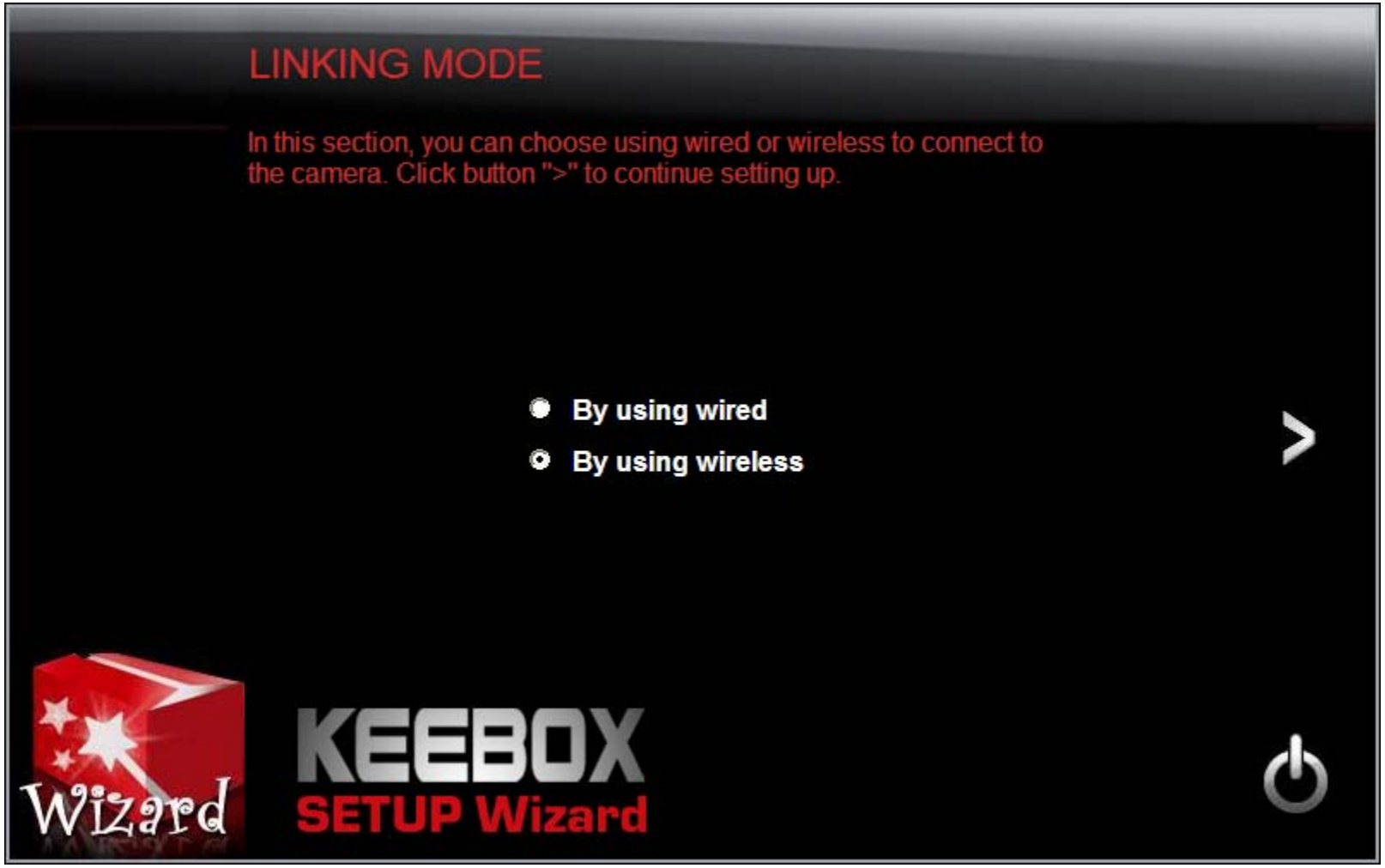
Click the **>** icon to continue.



A summary screen of the settings you have chosen appears. Click the **>** icon to continue.



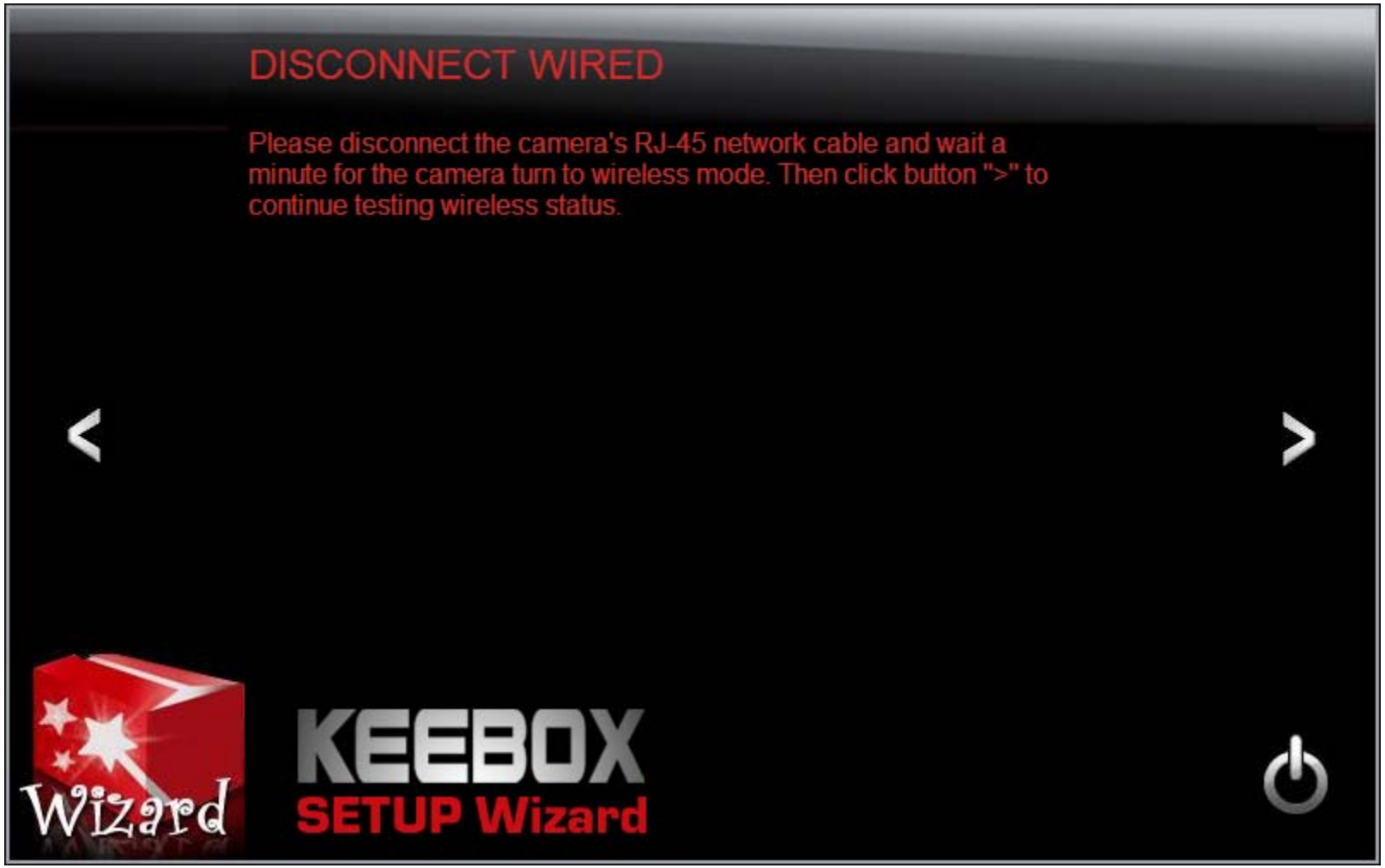
After the Setup Wizard configures the camera, a screen prompting you for the connection method appears.


LINKING MODE
In this section, you can choose using wired or wireless to connect to the camera. Click button ">" to continue setting up.
By using wired
By using wireless
>
Wizard
KEEBOX
SETUP Wizard

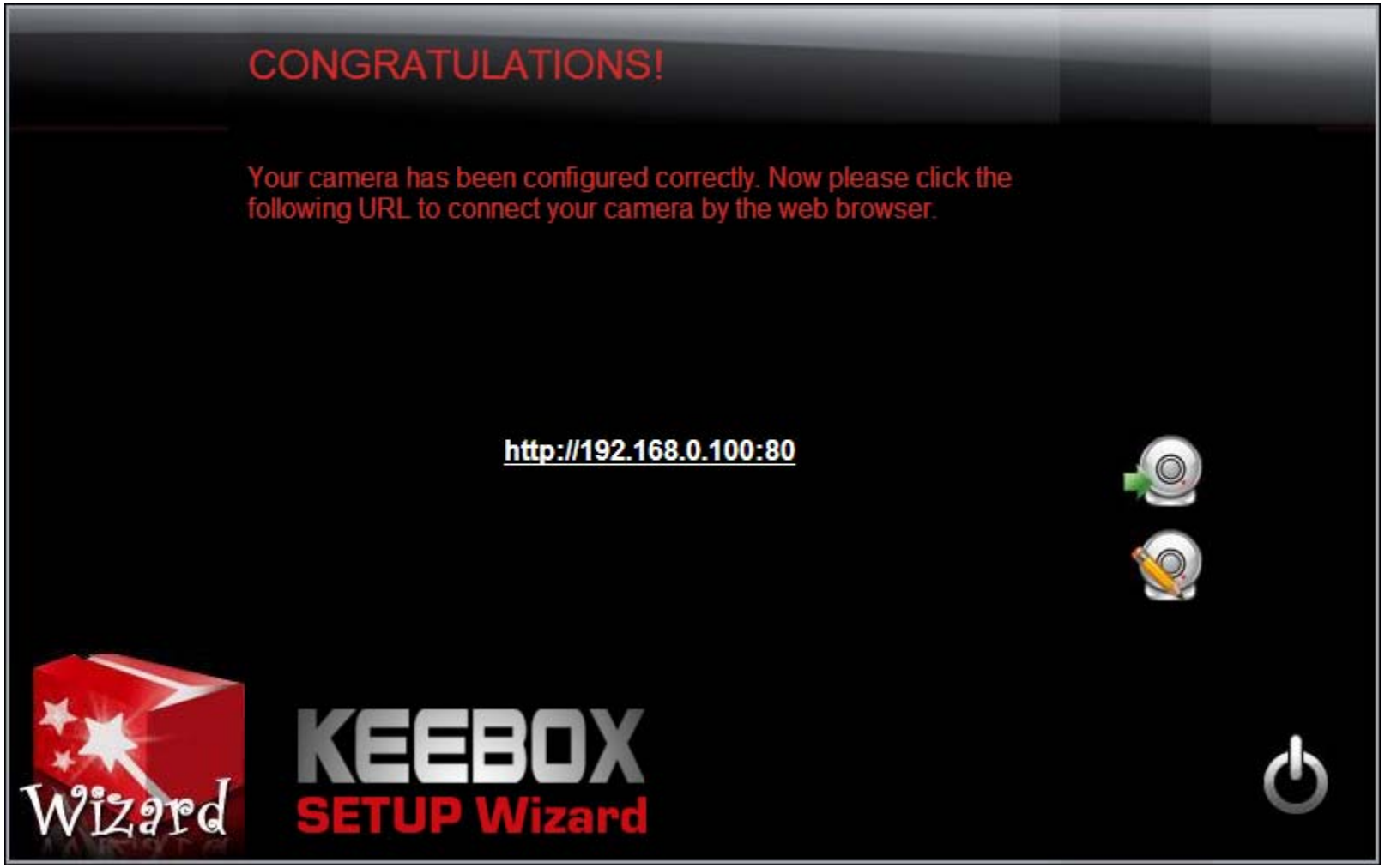
Check the radio button for the method of connection you want to use for your camera and click **>** to continue.

Connecting over wireless

Disconnect the Ethernet cable from the camera and wait for 1 minute for the camera to turn to wireless mode then click the **>** icon to continue.


DISCONNECT WIRED
Please disconnect the camera's RJ-45 network cable and wait a minute for the camera turn to wireless mode. Then click button ">" to continue testing wireless status.
<
>
Wizard
KEEBOX
SETUP Wizard

When the Setup Wizard has finished, the configuration is complete and the following screen appears:

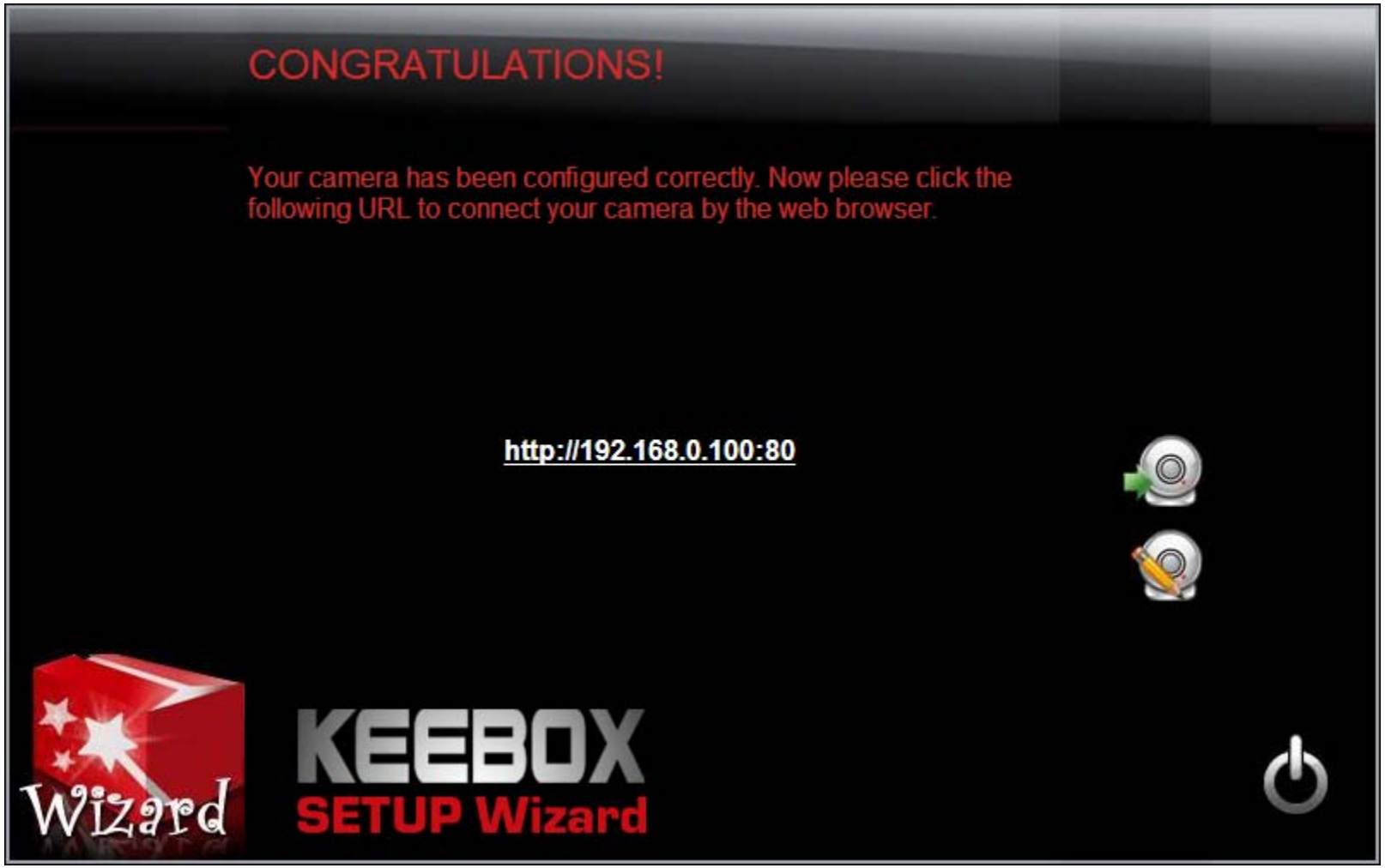

CONGRATULATIONS!
Your camera has been configured correctly. Now please click the following URL to connect your camera by the web browser.
http://192.168.0.100:80
Wizard
KEEBOX
SETUP Wizard

You are now ready to begin using your camera.

Connecting over a wired network

Confirm that the settings are correct. If they are correct, click the **>** icon to continue, otherwise click **<** and make revisions to your settings.

When you confirm your settings are correct, the following screen appears:


CONGRATULATIONS!
Your camera has been configured correctly. Now please click the following URL to connect your camera by the web browser.
http://192.168.0.100:80
Wizard
KEEBOX
SETUP Wizard

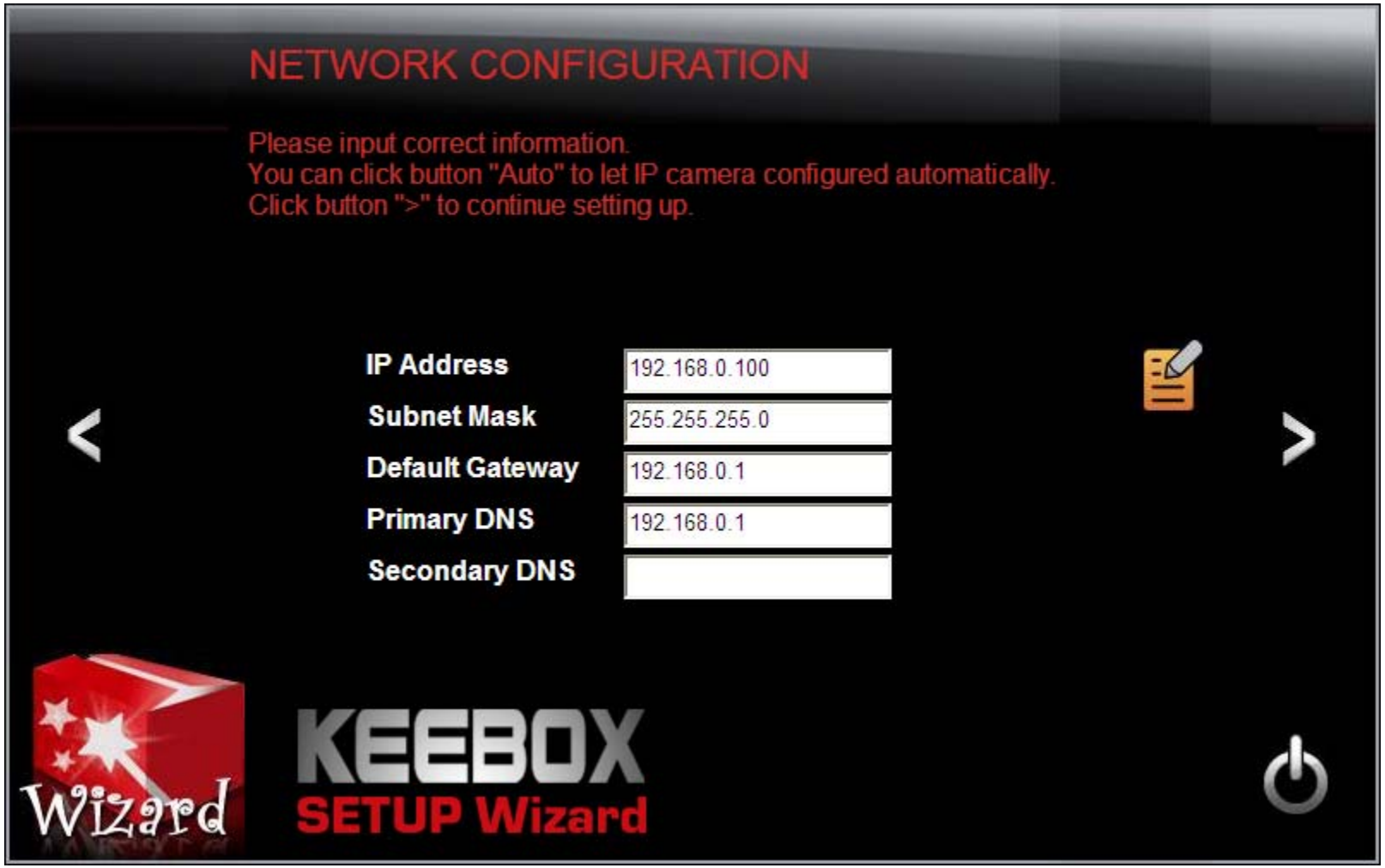
You are now ready to begin using your camera

Connecting with a Fixed IP

Select the **Fixed IP** radio button and click the **>** icon to continue.

SELECT A CONNECTION OPTION
Please select the connection option by your camera network environment. If you don't know how to choose, leave the option selected as default.
PPPoE (Select this option if your camera is directly connected to a DSL Modem and your ISP requires a PPPoE authentication to the Internet.)
DHCP (Select this option if your camera is connected to a router and DHCP is enabled.)
Fixed IP (Select this option if your camera is directly connected to a DSL Modem and your ISP has supplied you with a fixed IP for your Internet connection.)
Wizard
KEEBOX
SETUP Wizard

The Network Configuration screen appears. Enter the desired IP Address, Subnet Mask, Default Gateway, Primary and Secondary DNS Servers and click the **>** icon to continue. If you do not know the details, you can try clicking to allow the software to automatically detect the settings.



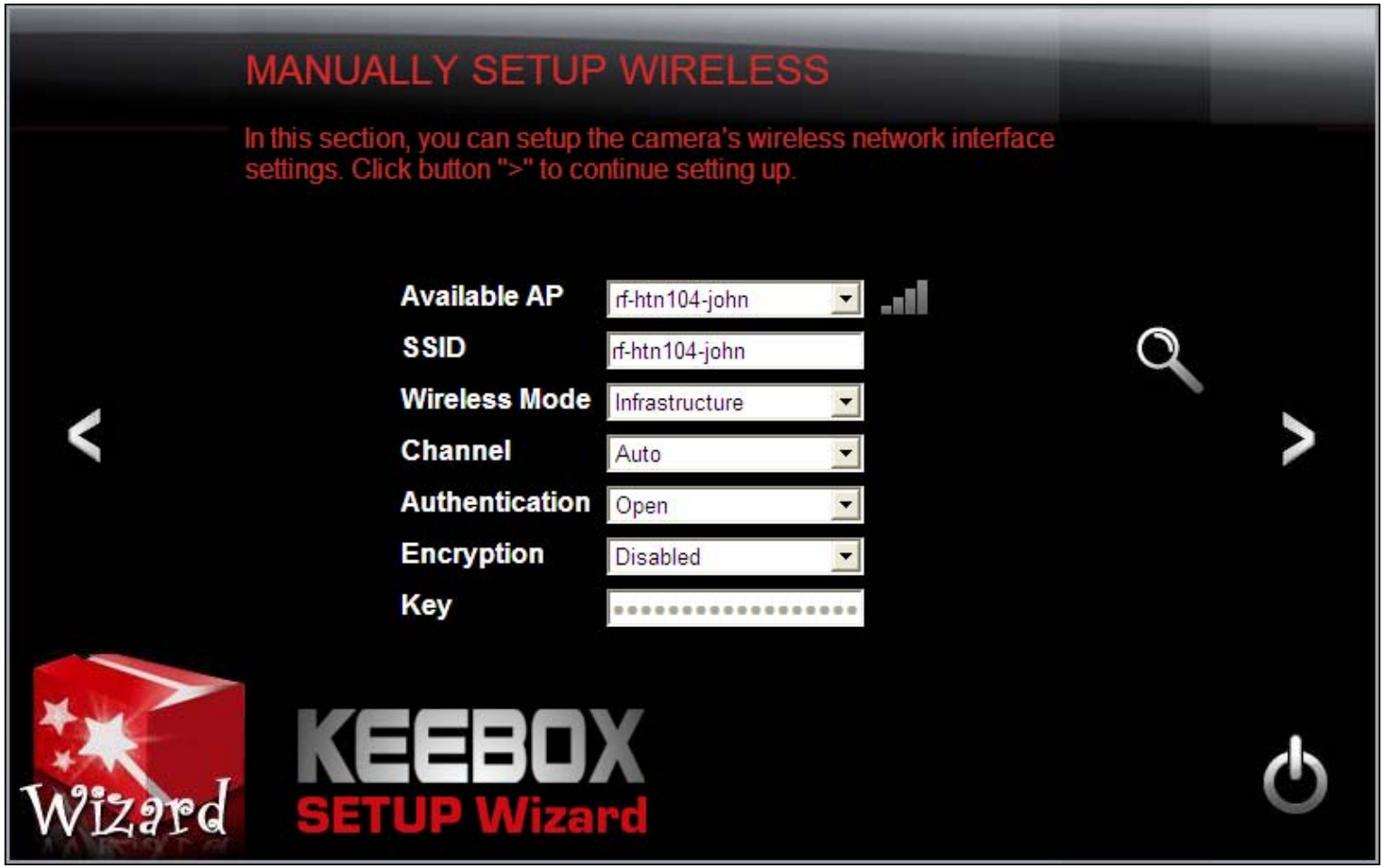
Select whether you want to use the camera over an 802.11n wireless connection or on a wired connection. Click the **>** icon to continue.

SETUP WIRELESS
In this section, you can choose whether use the camera's wireless or not. Click button ">" to continue setting up.
I want to use wireless for the camera.
No, I don't want to use wireless for the camera.
Wizard
KEEBOX
SETUP Wizard

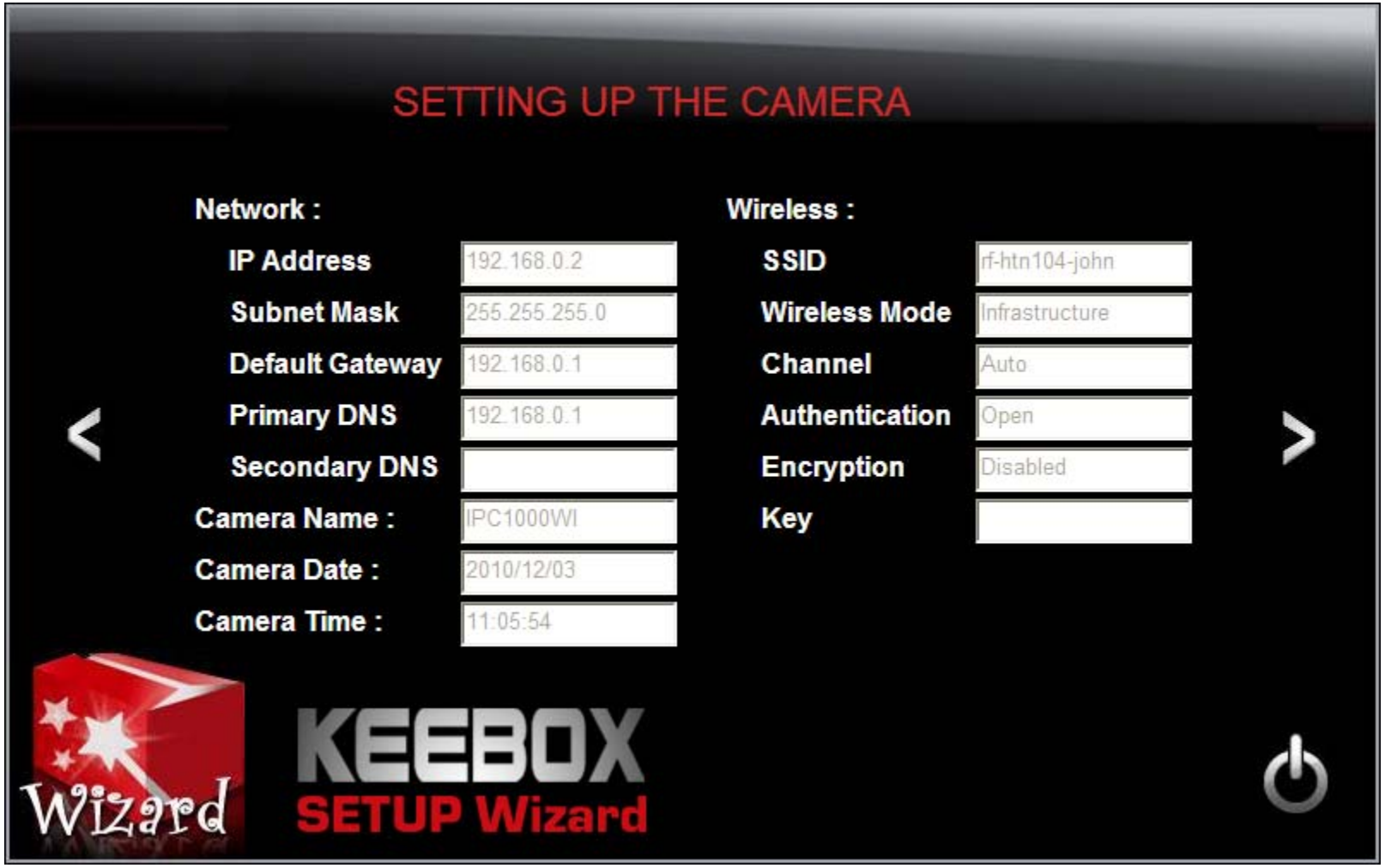
Wireless Connection

- Find the access point (AP) you wish to connect to from the **Available AP** drop down menu. If the AP you want to connect to is not listed, click the icon to re-scan for nearby APs.
- Select the **Wireless Mode**, either Infrastructure or Ad-hoc.
- In most cases you should leave the **Channel** set to Auto as the AP will determine the channel of operation.
- Select the type of **authentication** and **encryption** required by the access point and enter the **Key** required to connect.

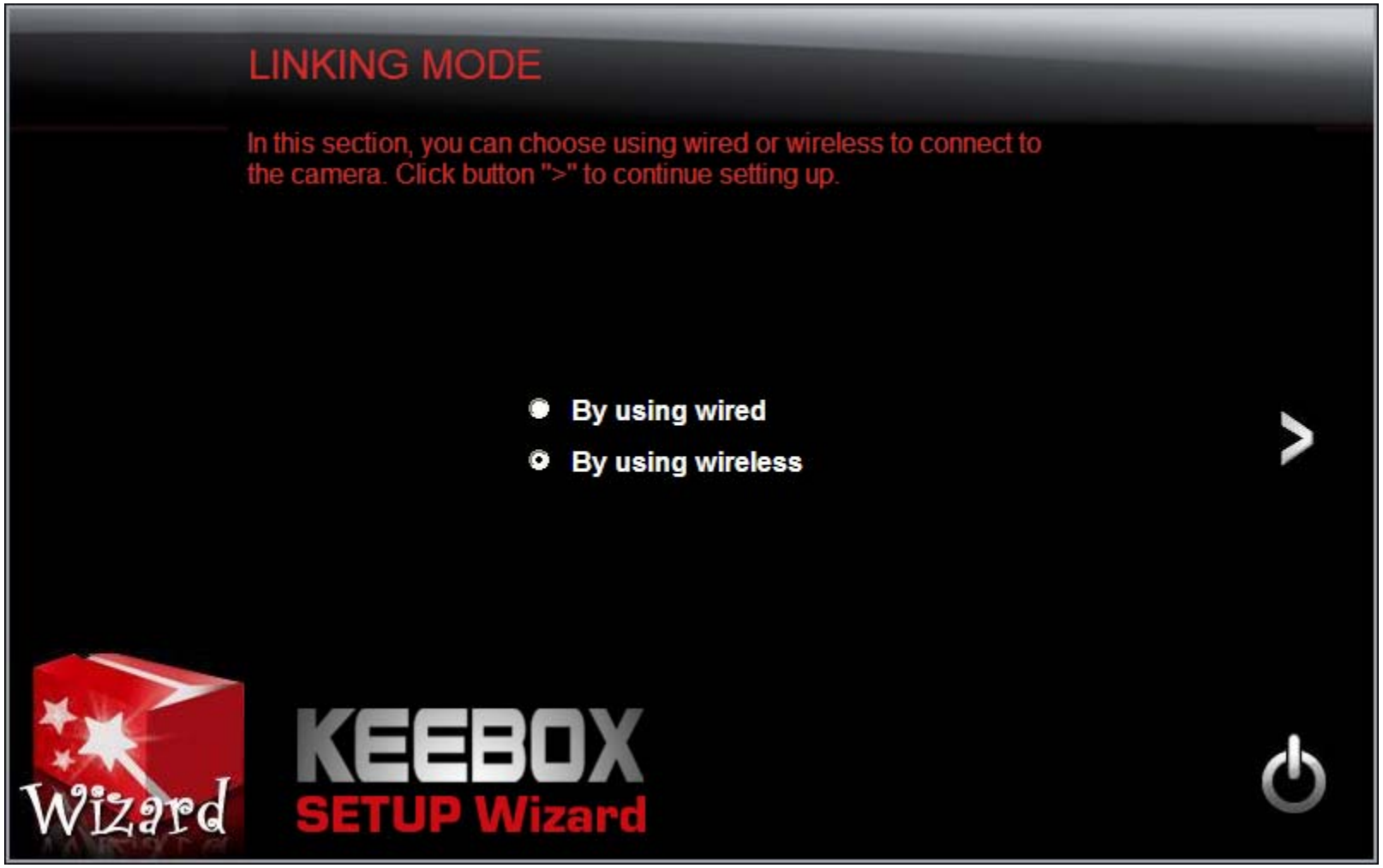
Click the **>** icon to continue.



A summary screen of the settings you have chosen appears. Click the **>** icon to continue.

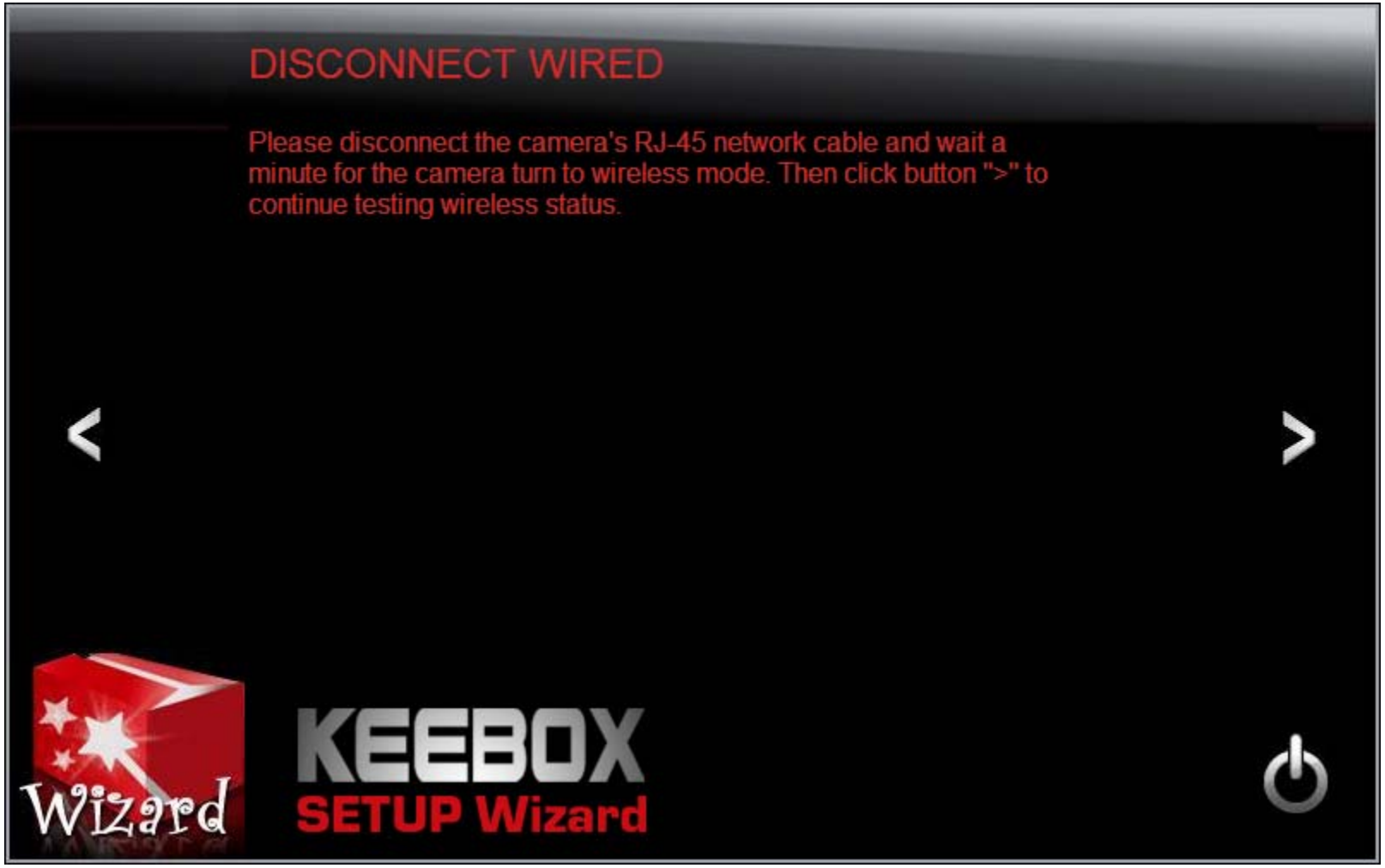


After the Setup Wizard configures the camera, a screen prompting you for the connection method appears.

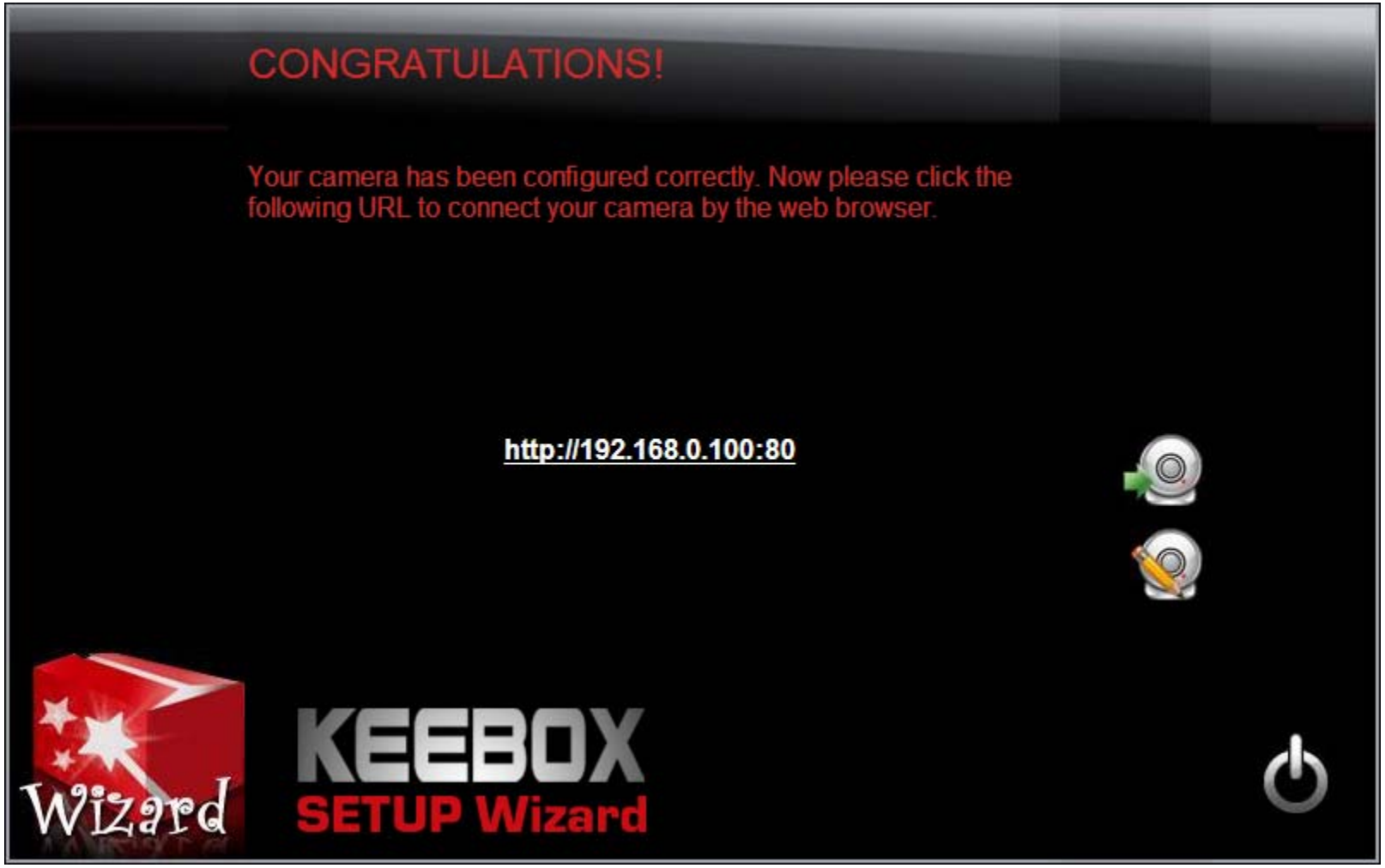

LINKING MODE
In this section, you can choose using wired or wireless to connect to the camera. Click button ">" to continue setting up.
By using wired
By using wireless
>
Wizard
KEEBOX
SETUP Wizard

Check the radio button for the method of connection you want to use for your camera and click **>** to continue.

Disconnect the Ethernet cable from the camera and wait for 1 minute for the camera to turn to wireless mode then click the **>** icon to continue.


DISCONNECT WIRED
Please disconnect the camera's RJ-45 network cable and wait a minute for the camera turn to wireless mode. Then click button ">" to continue testing wireless status.
<
>
Wizard
KEEBOX
SETUP Wizard

After a moment, the configuration is complete and the following screen appears:

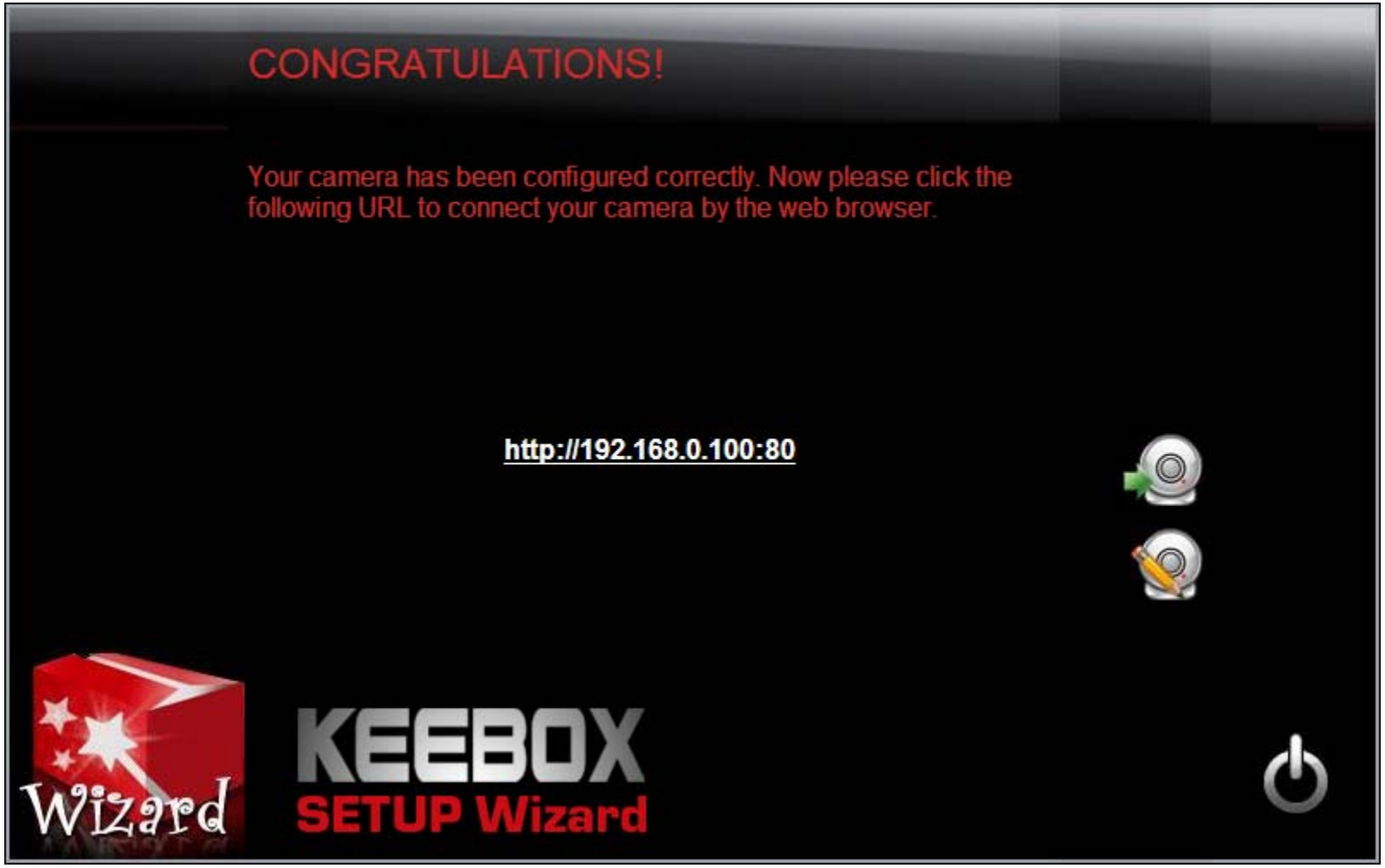

CONGRATULATIONS!
Your camera has been configured correctly. Now please click the following URL to connect your camera by the web browser.
http://192.168.0.100:80
Wizard
KEEBOX
SETUP Wizard

You are now ready to begin using your camera.

Connecting over a wired network

Confirm that the settings are correct. If they are correct, click the **>** icon to continue, otherwise click **<** and make revisions to your settings.

When you confirm your settings are correct, the following screen appears:


CONGRATULATIONS!
Your camera has been configured correctly. Now please click the following URL to connect your camera by the web browser.
http://192.168.0.100:80
Wizard
KEEBOX
SETUP Wizard

You are now ready to begin using your camera.

Connecting the camera to your network using WPS

An alternative method of connecting your camera to your network is by using WPS. WPS is a quick, simple and secure method of adding devices to a network. If you have a router which supports WPS follow the steps below, otherwise, please use the wired mode of setting up the camera.

Note: Please complete the following steps within 2 minutes.

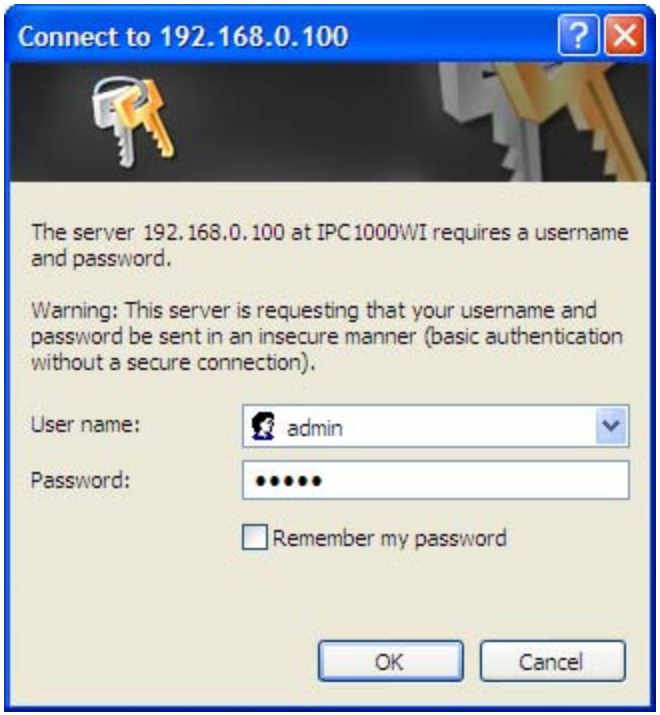
1. Press the WPS button on your wireless device to activate the function.

2. Press the WPS button of your wireless network camera for at least 5 seconds. The WPS light will start to blink green. Within 2 minutes, the WPS light will either show a solid green light indicating that the connection was successful or the light will stop flashing and will not be illuminated. If the light is not illuminated after 2 minutes, the connection was unsuccessful. Try repositioning the camera or router and try the WPS connection again.

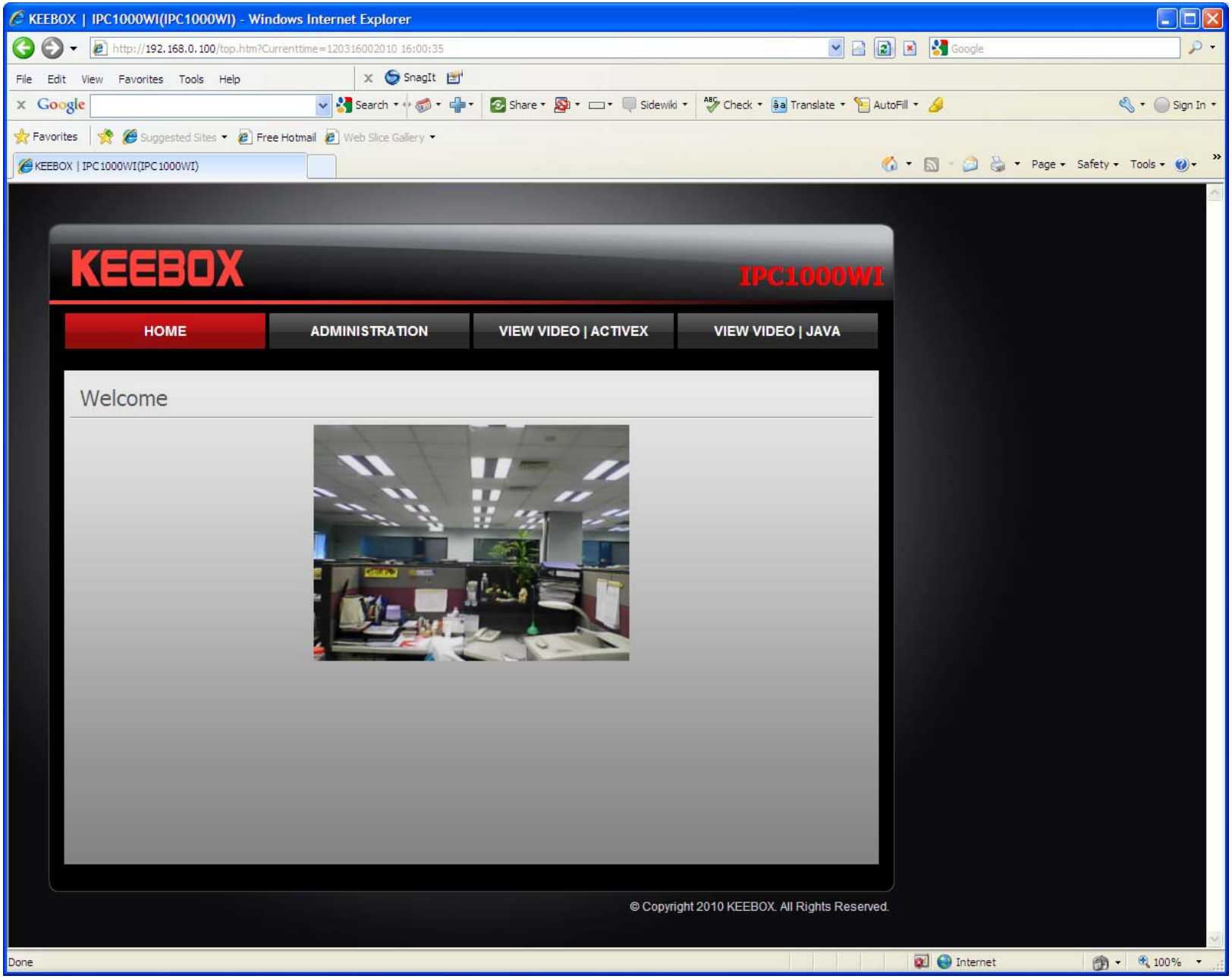
Configuration

Using the web-based configuration interface

After completing the Setup Wizard, you are ready to use your camera. The camera's built-in Web configuration utility is designed to allow you to easily access and configure your IPC1000W/IPC1000WI camera. Open a web browser such as Internet Explorer® and enter the IP address of your camera. To log in, use the User name **admin** and the password you created in the Setup Wizard. If you did not create a password, the default password is **admin**. After entering your password, click **OK**.


Connect to 192.168.0.100
The server 192.168.0.100 at IPC1000WI requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
admin
Password:
Remember my password
OK
Cancel

The home page for the IPC1000W/IPC1000WI appears.

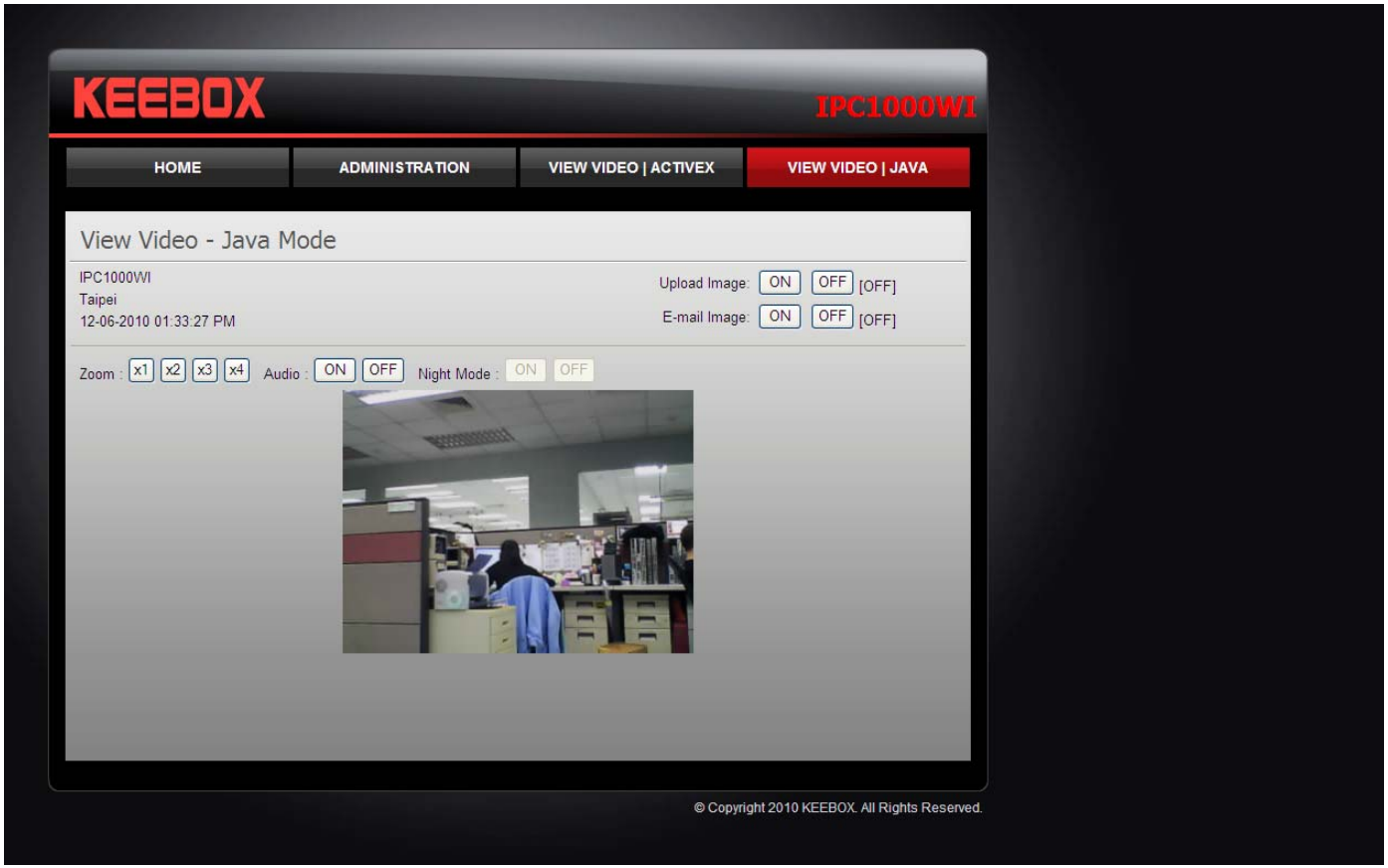


Viewing Video

Click **VIEW VIDEO | ACTIVEX** or **VIEW VIDEO | JAVA** to begin viewing live video from your camera.

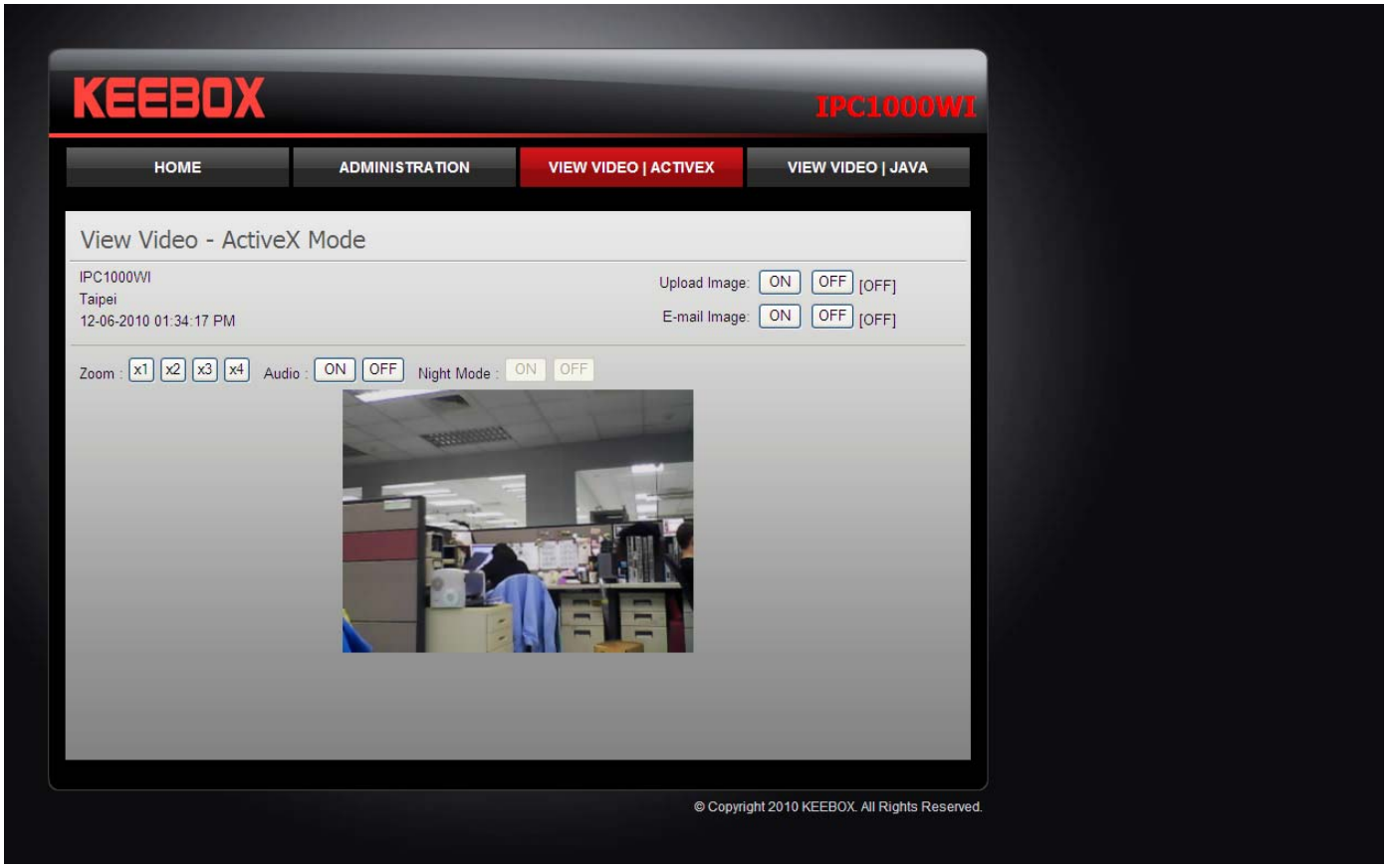
VIEW VIDEO | JAVA

Please make sure that you have the latest version of Java installed on your machine to ensure proper operation when viewing video in Java mode. The Java application can be downloaded from Sun's website free of charge (http://www.java.com)



VIEW VIDEO | ACTIVEX

Windows users who do not have Java installed can choose ActiveX mode to view video. Internet Explorer will prompt you to install ActiveX when you click on the **VIEW VIDEO | ACTIVEX** link. Mac users must use the Java mode to view video.

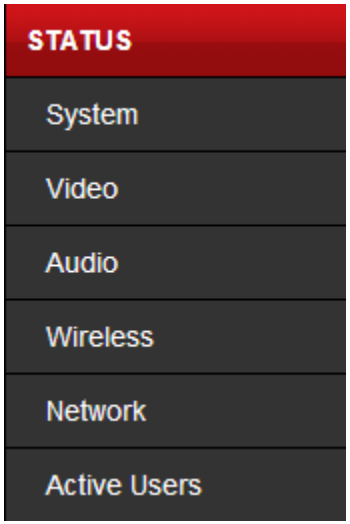


Viewing camera settings

To view camera settings:

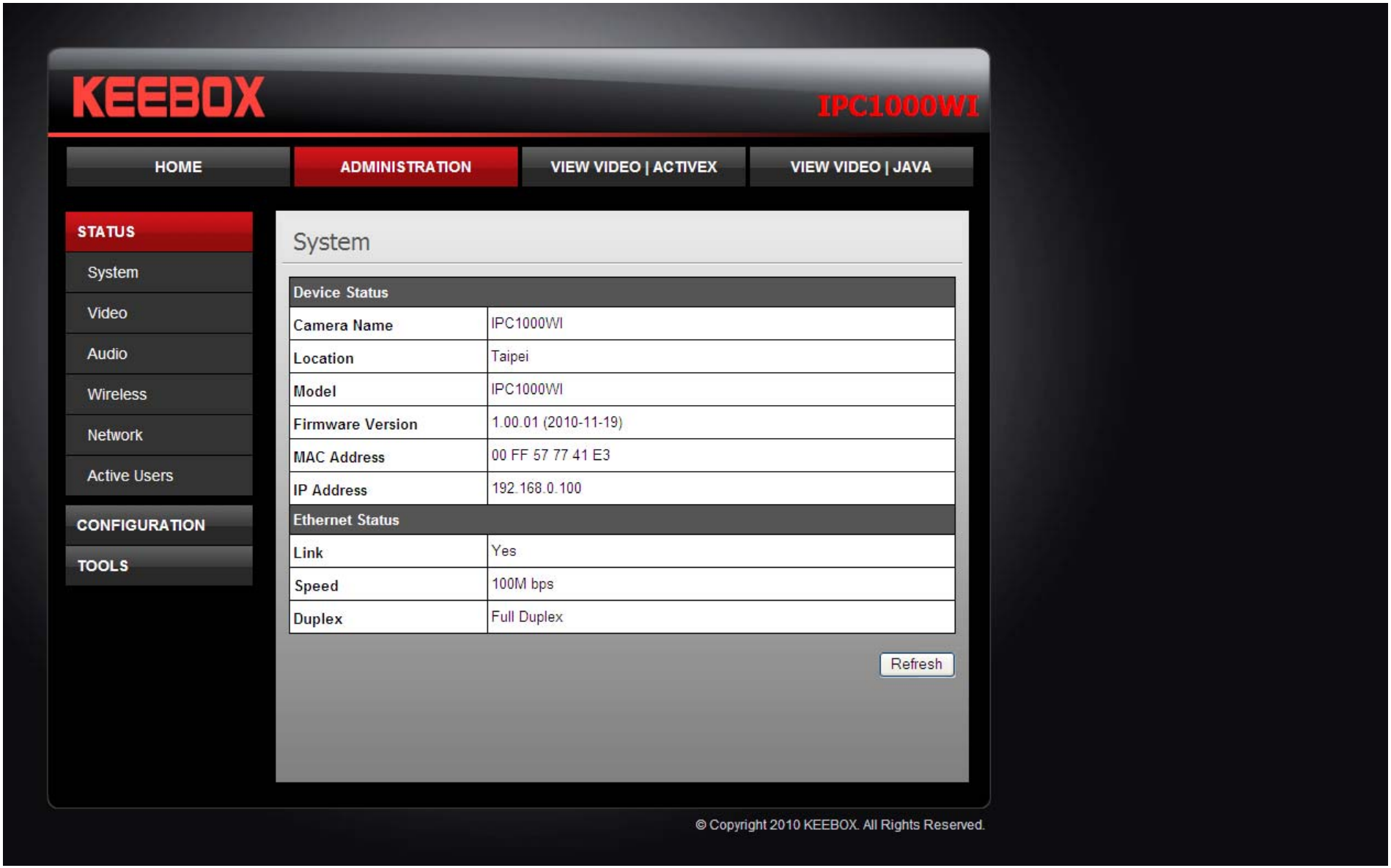
1. Login to the camera as described in the section **Using the web-based configuration interface.**
2. Click **ADMINISTRATION.** The system status screen appears.

From the menu on the left side of the screen, select an option under the **STATUS** heading.



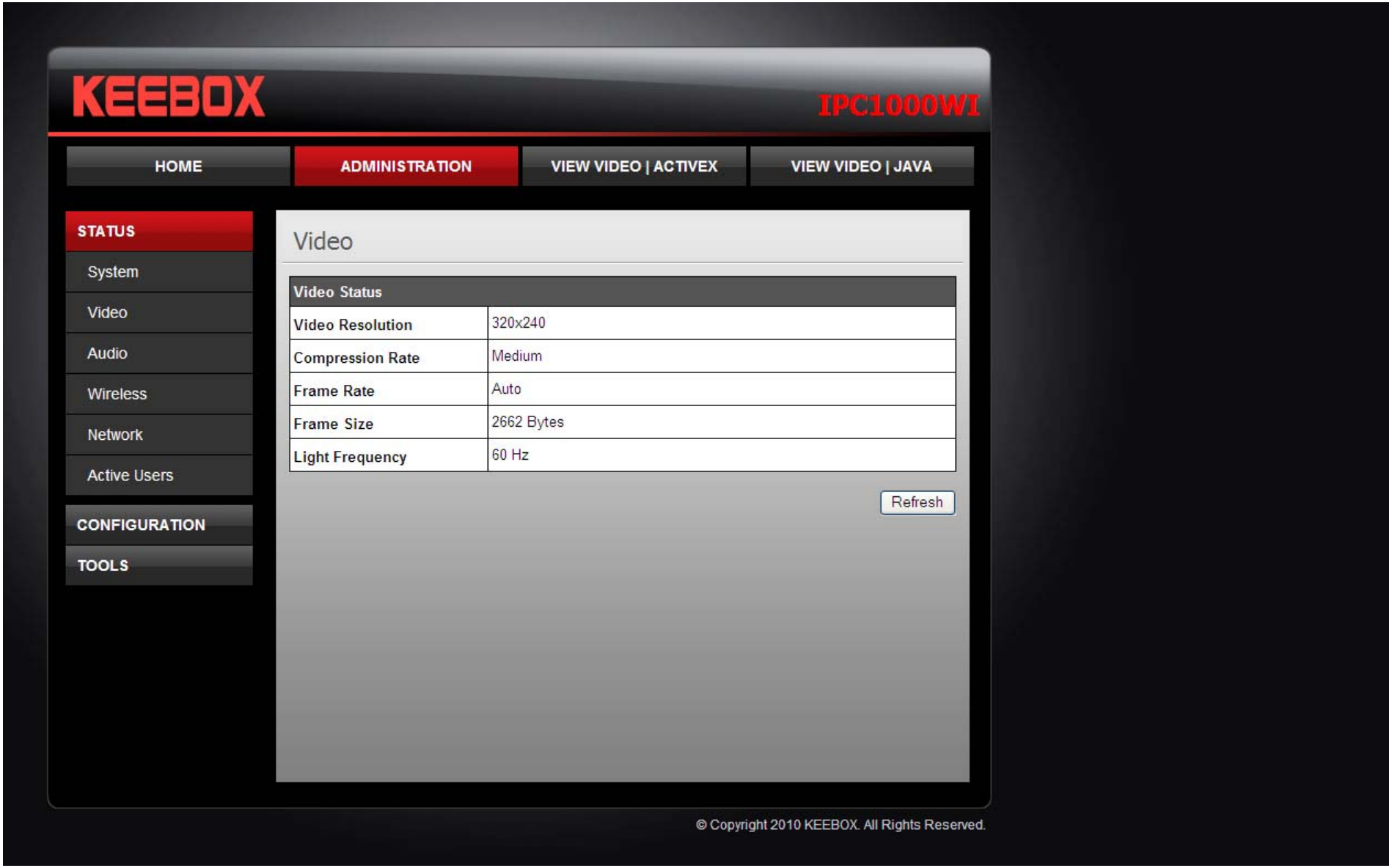
System

This screen shows the Camera Name, Location, Model, Firmware Version, MAC Address, IP Address, Ethernet Link Status, Speed and Duplex type.



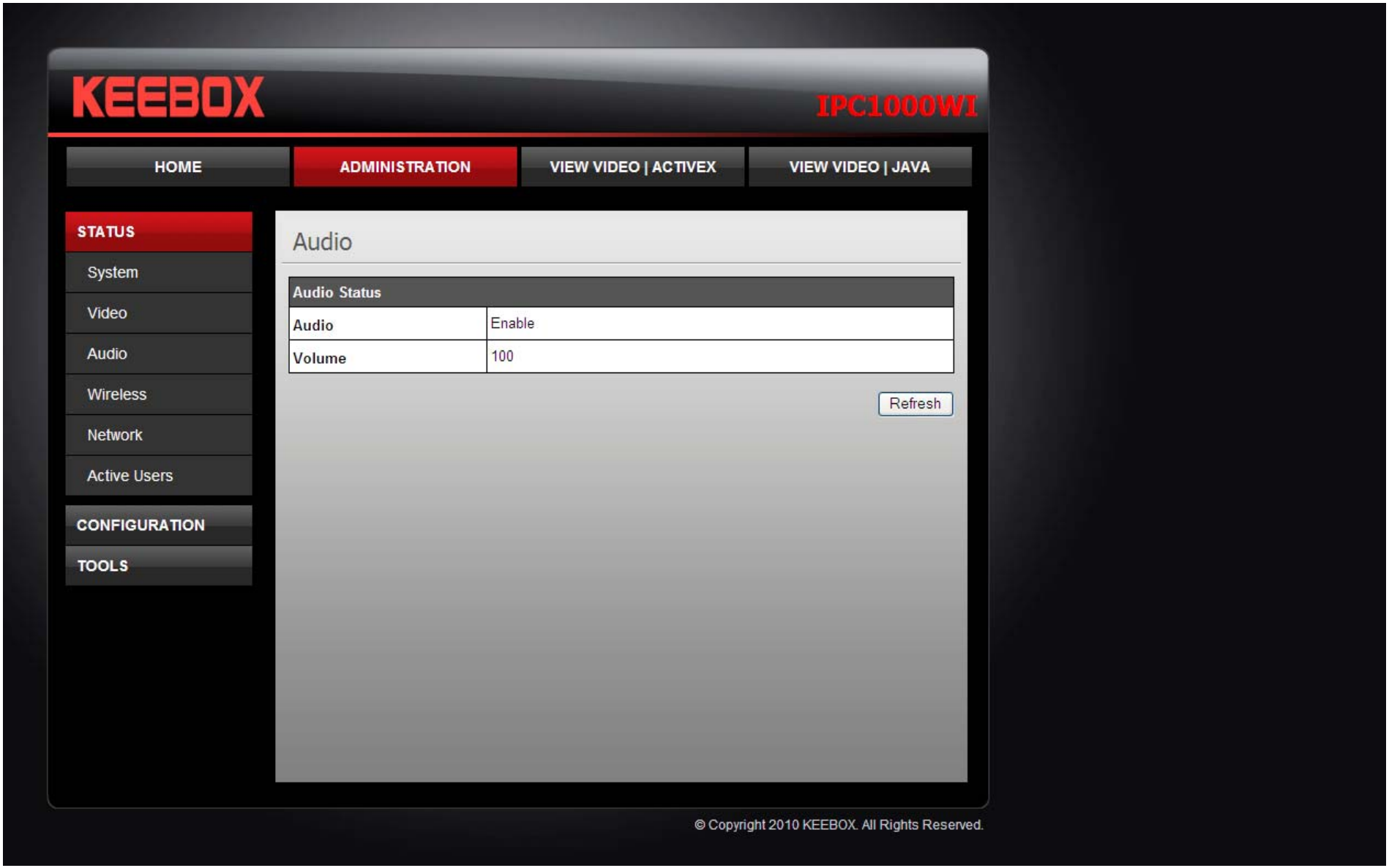
Video

This screen shows the details of the video capture settings including Video Resolution, Compression Rate, Frame Rate, Frame Size and Light Frequency.



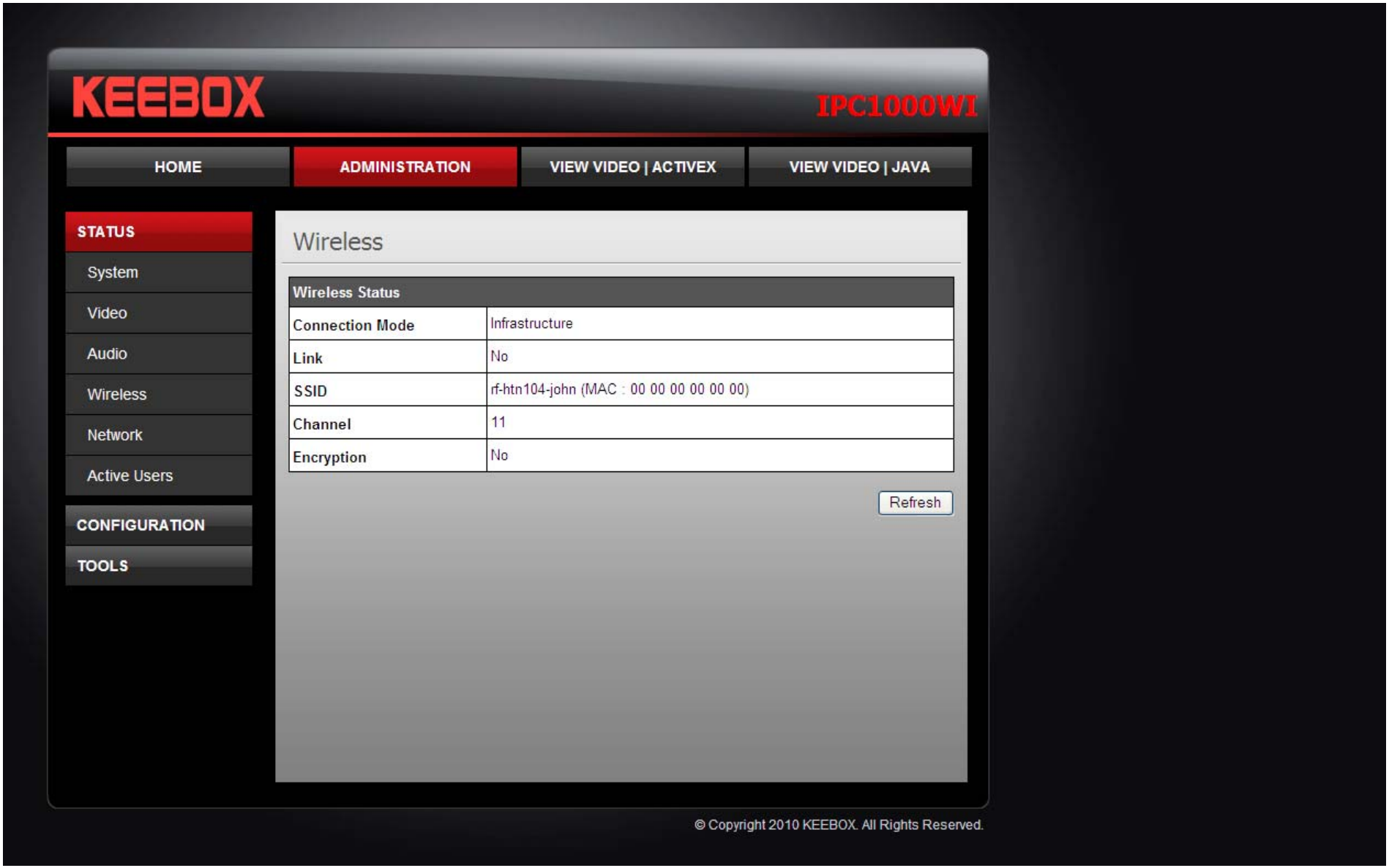
Audio

This screen shows whether audio is enabled and the volume level of the audio.



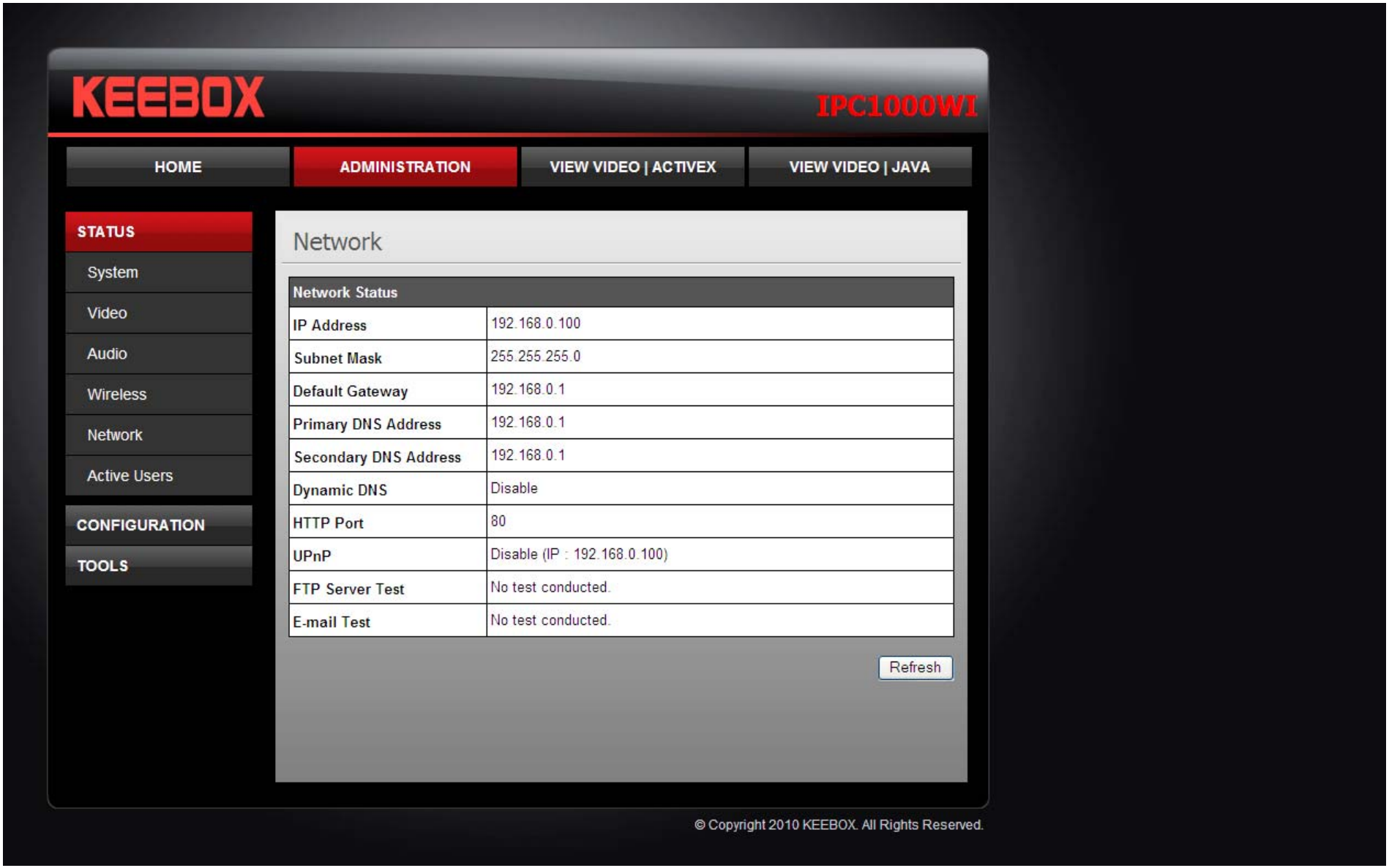
Wireless

This screen shows the connection mode, link status, SSID name, channel and encryption status.



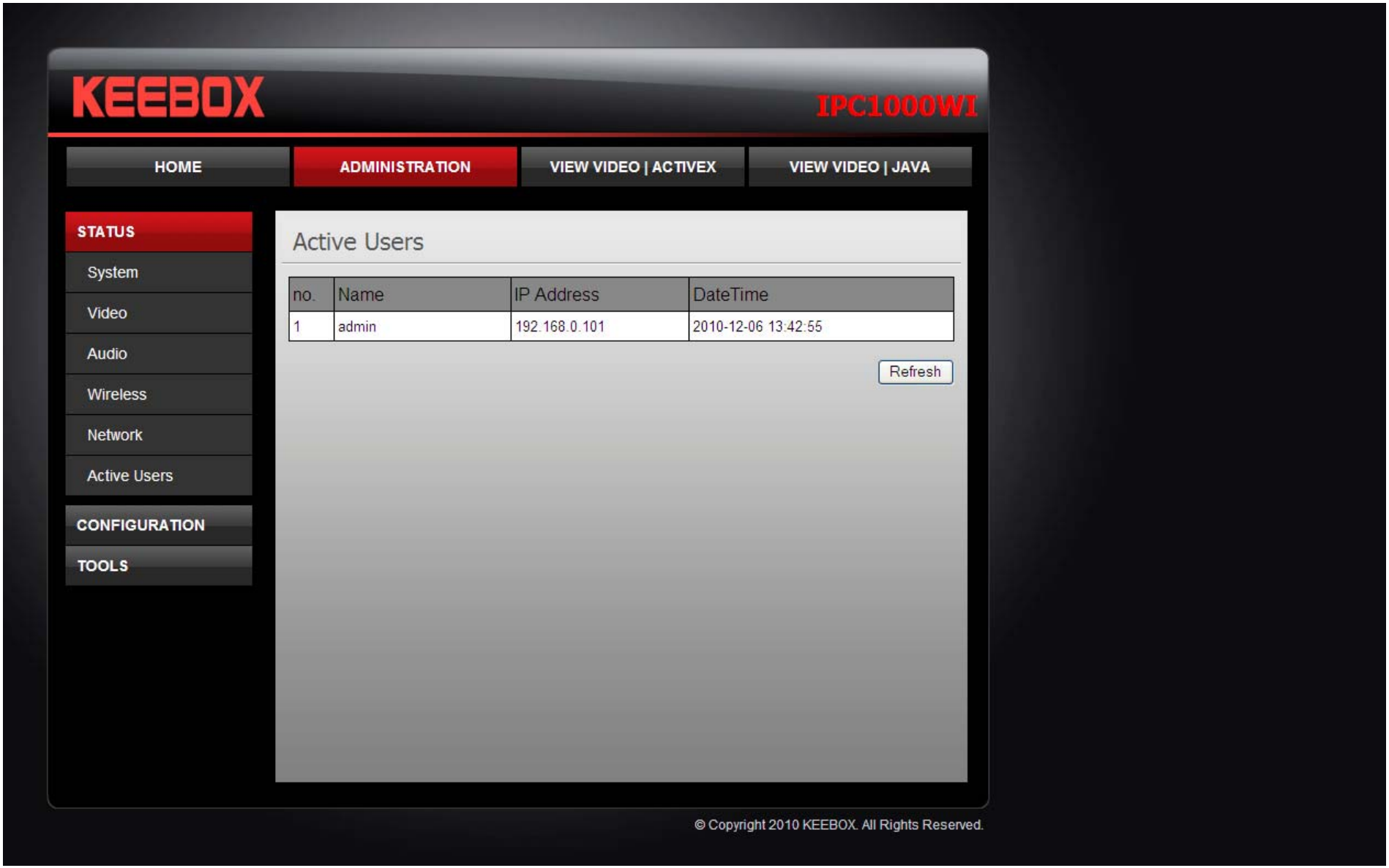
Network

This screen shows various network statistics related to your camera including IP Address, Subnet Mask and Default Gateway.



Active Users

This screen shows whether there are any active users logged on to the camera viewing live video.

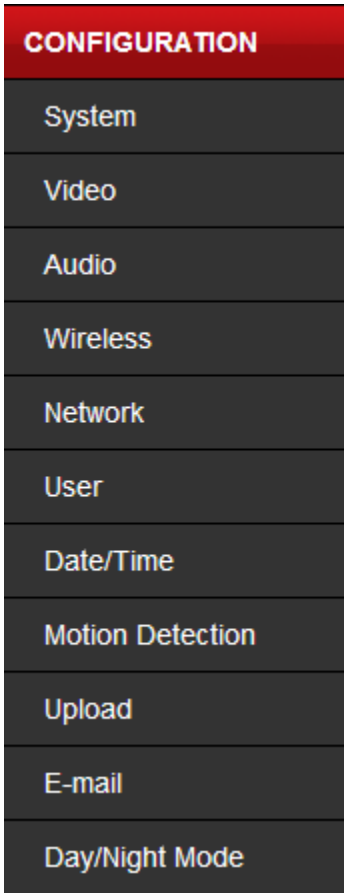


Configuring camera settings

The IPC1000W/IPC1000WI allows you to make configuration changes from anywhere by connecting to the camera using a standard web browser.

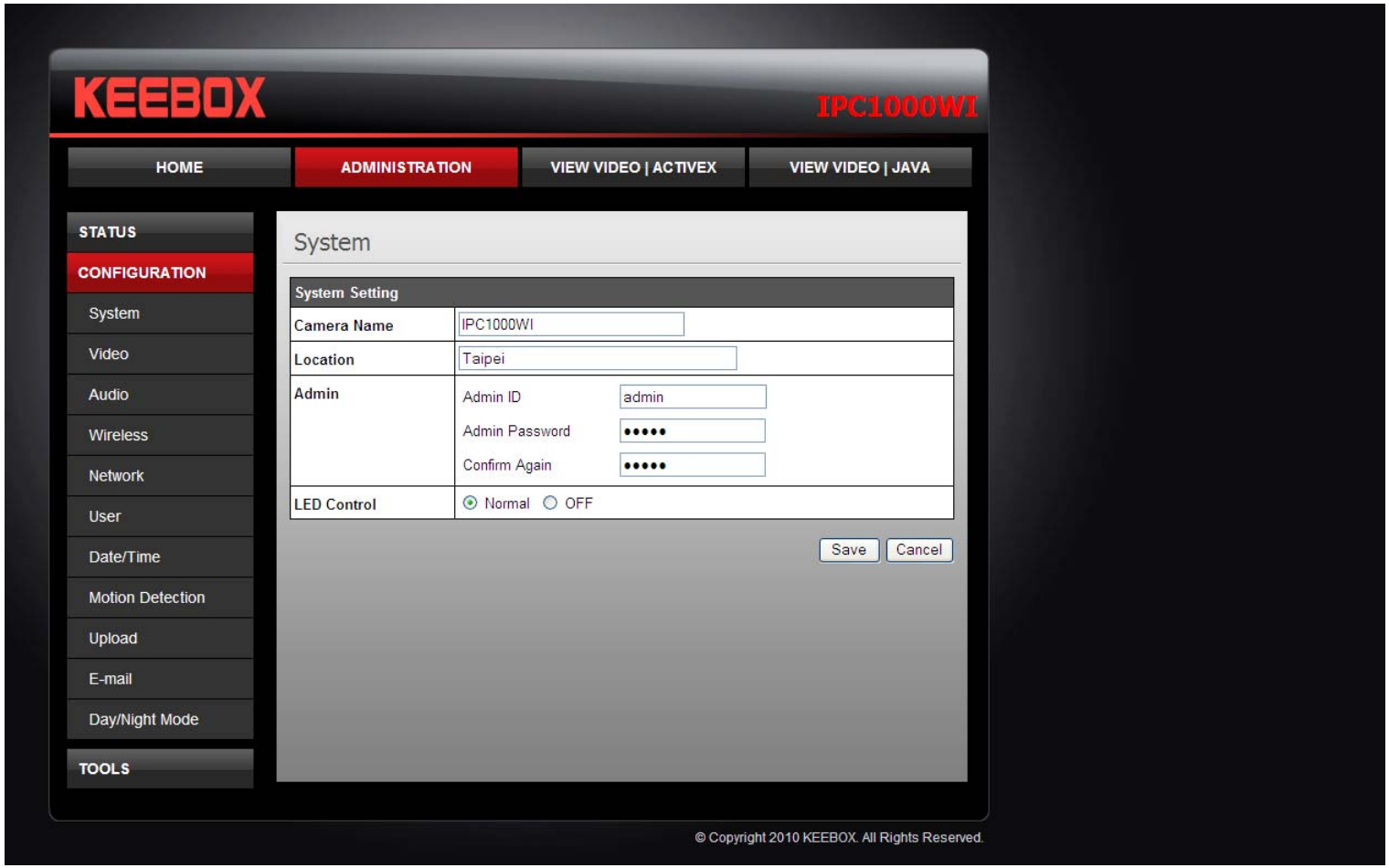
To configure camera settings:

1. Login to the camera as described in the section **Using the web-based configuration interface.**
2. Click **ADMINISTRATION.** The system status screen appears.
3. Click **CONFIGURATION** from the menu on the left side of the screen. The System configuration screen is displayed. You can then click on any of the menu items on the left of the screen under the Configuration menu to modify settings.



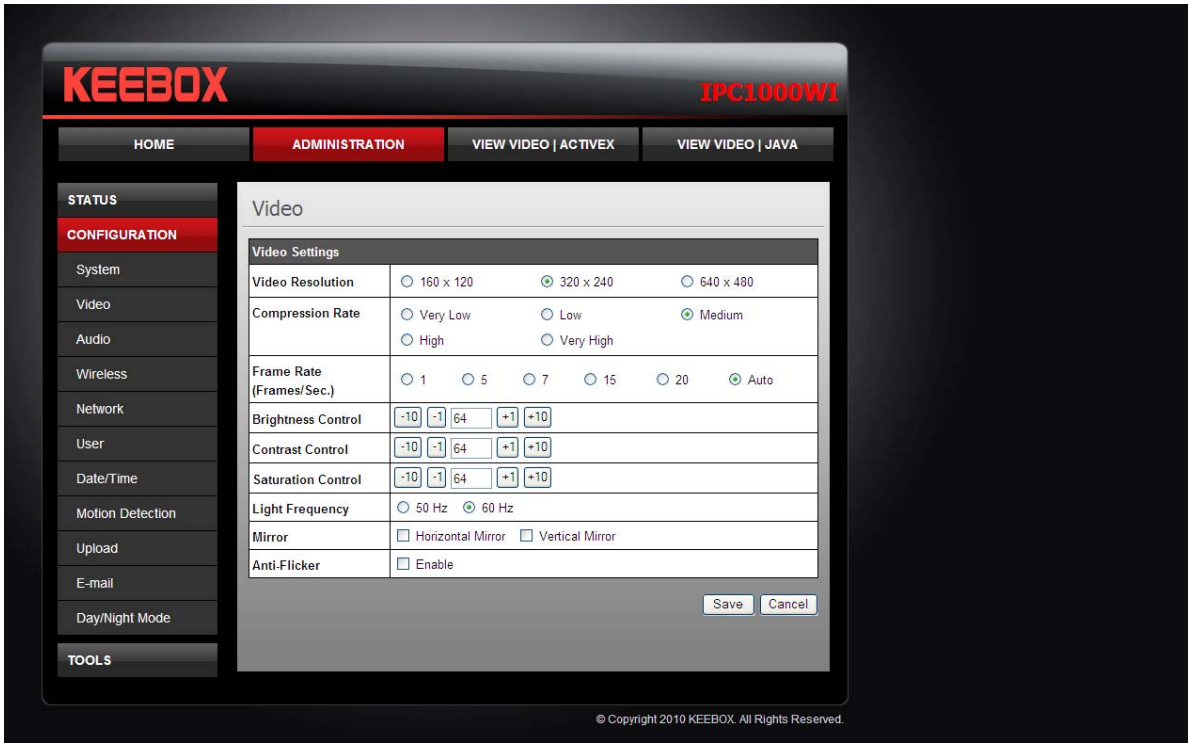
System

- **Camera Name:** This is the name used to identify your camera on your network.
- **Location:** You can enter a description of the place where the camera is.
- **Admin:** In this field you can change the administrator user name and password.
- **LED Control:** Setting this to **Normal** will display the lights on the front of the camera indicating power and network activity. Setting this to **OFF** will turn off both lights on the front of the camera.



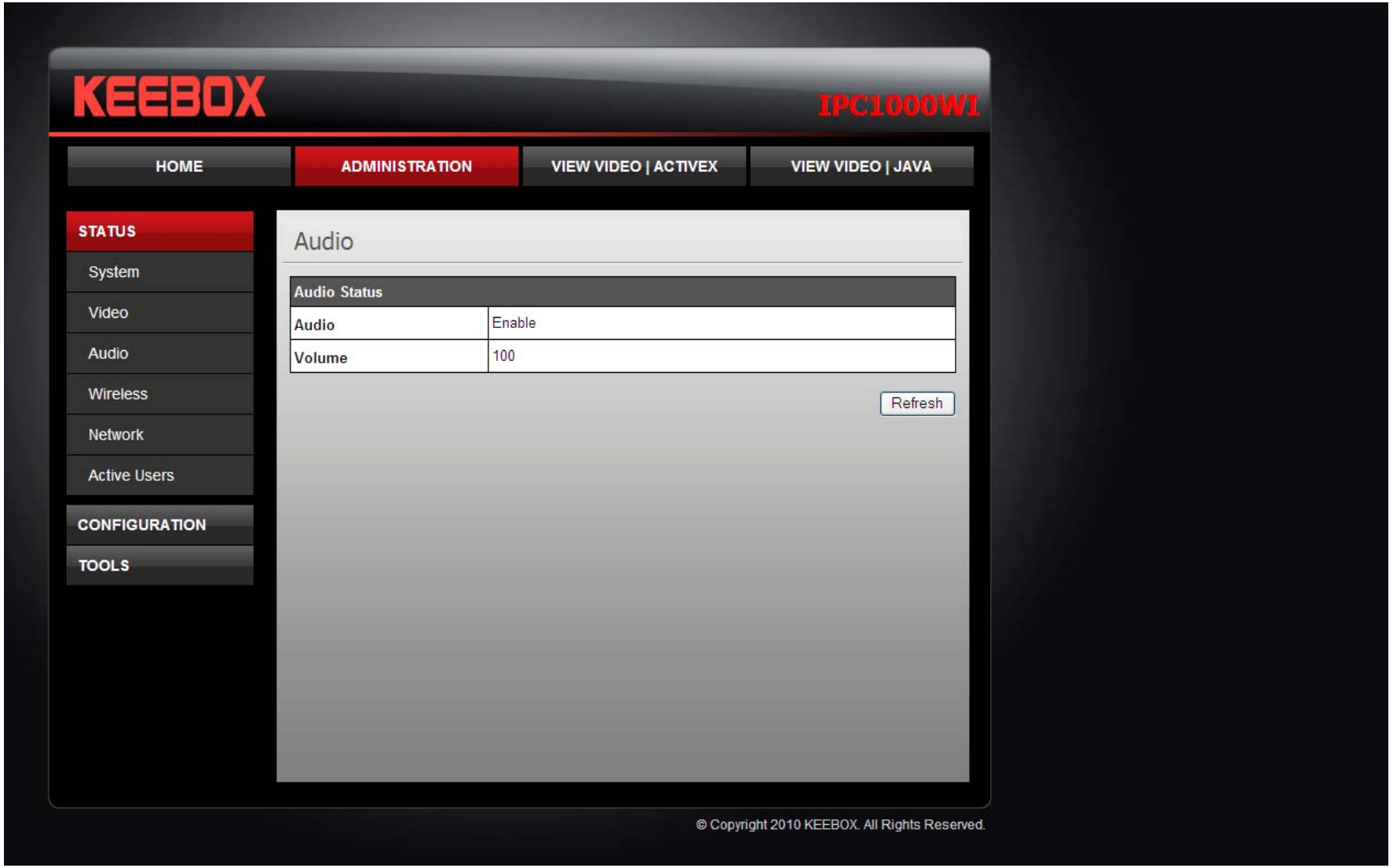
Video

- **Video Resolution:** Select from one of the three resolutions. Higher values provide better quality but at the expense of higher bandwidth requirements on your network or internet connection.
- **Compression Rate:** Select a compression rate. Higher rates of compression will reduce network load at the expense of lower image quality.
- **Frame Rate (Frames/Sec.):** Select the number of frames per second you would like for your video. Higher rates provide smoother video but require more bandwidth on your network or internet connection.
- **Brightness Control:** Allows you to control the brightness level. Enter a value between 1 and 128.
- **Contrast Control:** Allows you to control the contrast level. Enter a value between 1 and 128.
- **Saturation Control:** Allows you to control the saturation level. Enter a value between 1 and 128.
- **Light Frequency:** Select the correct frequency (50Hz/60Hz) to reduce the amount of flicker.
- **Mirror:** Choose whether to mirror the image horizontally or vertically.
- **Anti-Flicker:** Check the box to enable anti-flicker.



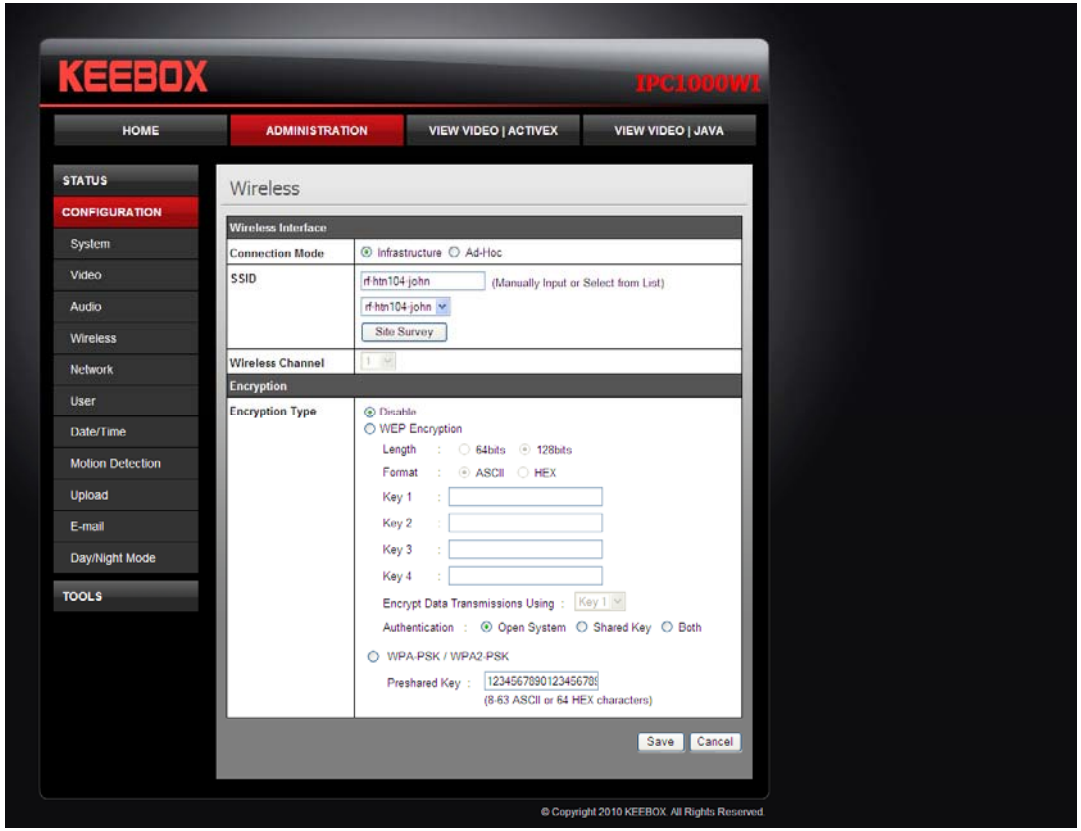
Audio

- **Audio:** Choose whether to **Enable** or **Disable** the camera audio feed.
- **Volume:** Select the volume percentage level.



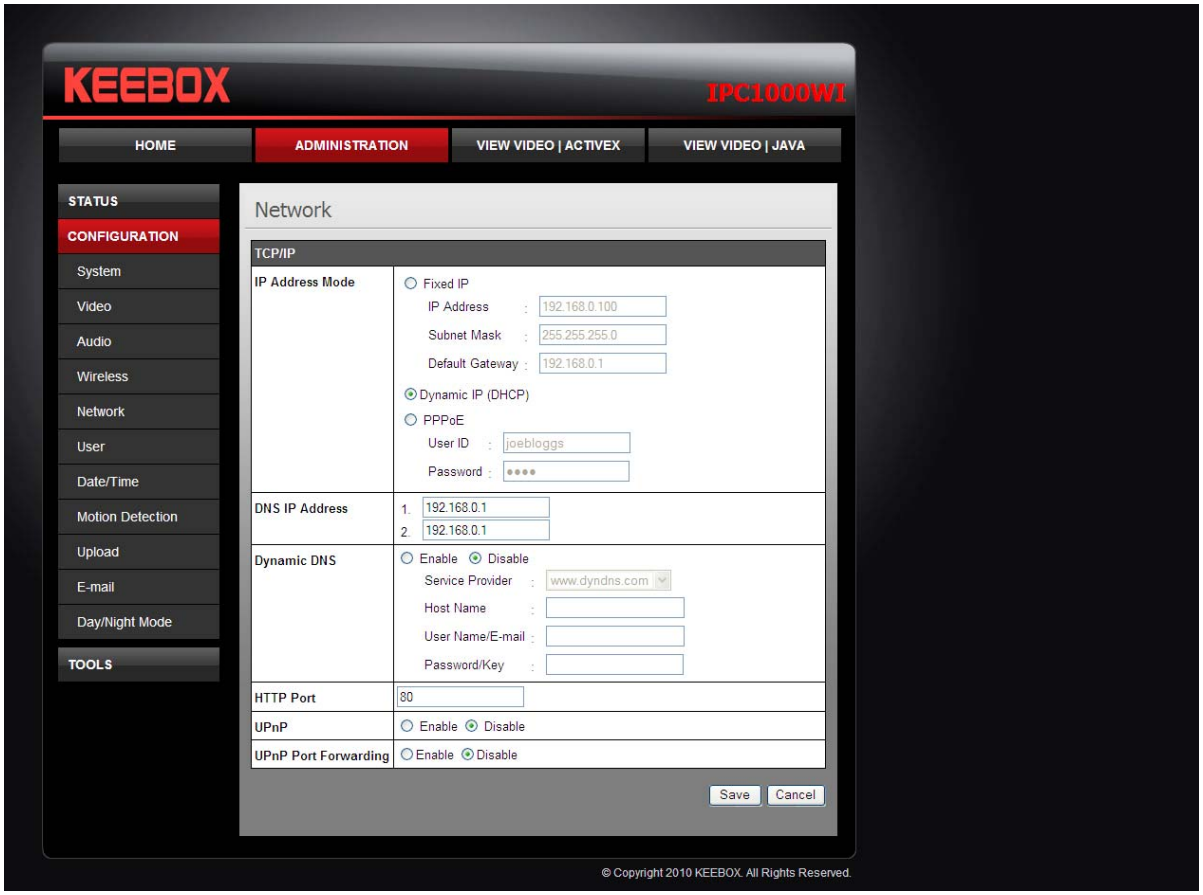
Wireless

- **Connection Mode: Infrastructure** is a wireless connection using an access point as a transmission point of all wireless devices. **Ad-Hoc** is a wireless connection used without an access point, where your IPC1000W/IPC1000WI is directly connected to your PC. This is done using the on-board wireless adapter on the IPC1000W/IPC1000WI connected to a wireless adapter on the PC.
- **SSID:** Service Set Identifier. This is an identifier for your network. Manually enter the SSID of your wireless network or select it from the drop down menu. You can click **Site Survey** to see a list of wireless networks within range and further details of their settings.
- **Wireless Channel:** When using Infrastructure mode, the channel is specified by the access point and the channel will not be selectable on this menu. When using Ad-Hoc mode, you can specify on which channel you want to communicate with the camera.
- **Encryption Type:** It is highly recommended that you encrypt the connection. In Infrastructure mode, select an encryption type and enter details where applicable as you have specified on the access point. If you intend to use Ad-Hoc mode, you can specify here the encryption type and preshared key that you want to use to connect from the PC.



Network

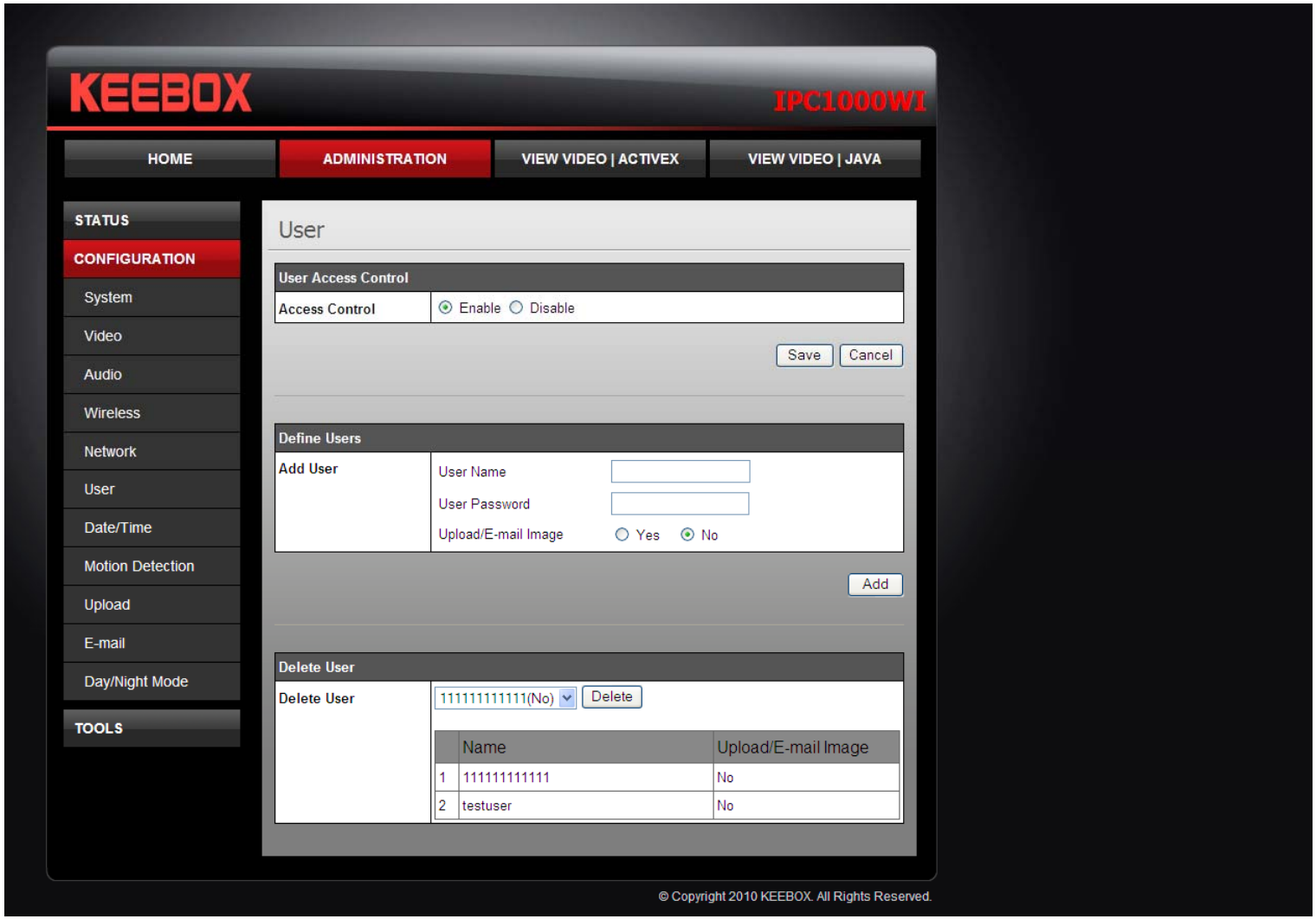
- **IP Address Mode:** Choose a method to assign an IP address to your camera.
  - **Fixed IP** – If you want to assign a static or fixed IP address to the camera, you may do so here. Your network administrator should be able to provide you with the necessary details to complete this section.
  - **Dynamic IP (DHCP)** – Allows a DHCP server to automatically assign the camera a network address.
  - **PPPoE** – If you are using a PPPoE connection, enter your user name and password here
- **Dynamic IP:** Enter the Domain Name Server addresses which translate names to IP addresses.
- **Dynamic DNS:** The Dynamic DNS feature allows you to host a server (e.g. web server, FTP or Game server) using a domain that you own with a dynamically assigned IP address. Many ISPs assign IP addresses dynamically i.e. the IP address changes each time you connect and disconnect. Using a Dynamic DNS service provider, you can connect to your camera no matter what your IP address. Enter the details of your dynamic DNS service provider here.



- **HTTP Port:** You may configure a second HTTP port that will allow you to connect to the camera using a standard web browser. The port can be set to a number other than the default TCP ports 80. A corresponding port must be opened on the router. For example, if the port is changed to 1010, users must type "http://192.168.0.100:1010" instead of only "http://192.168.0.100".
- **uPnP & uPnP Port Forwarding:** Enable these to set your camera as a universal plug n play device on your network.

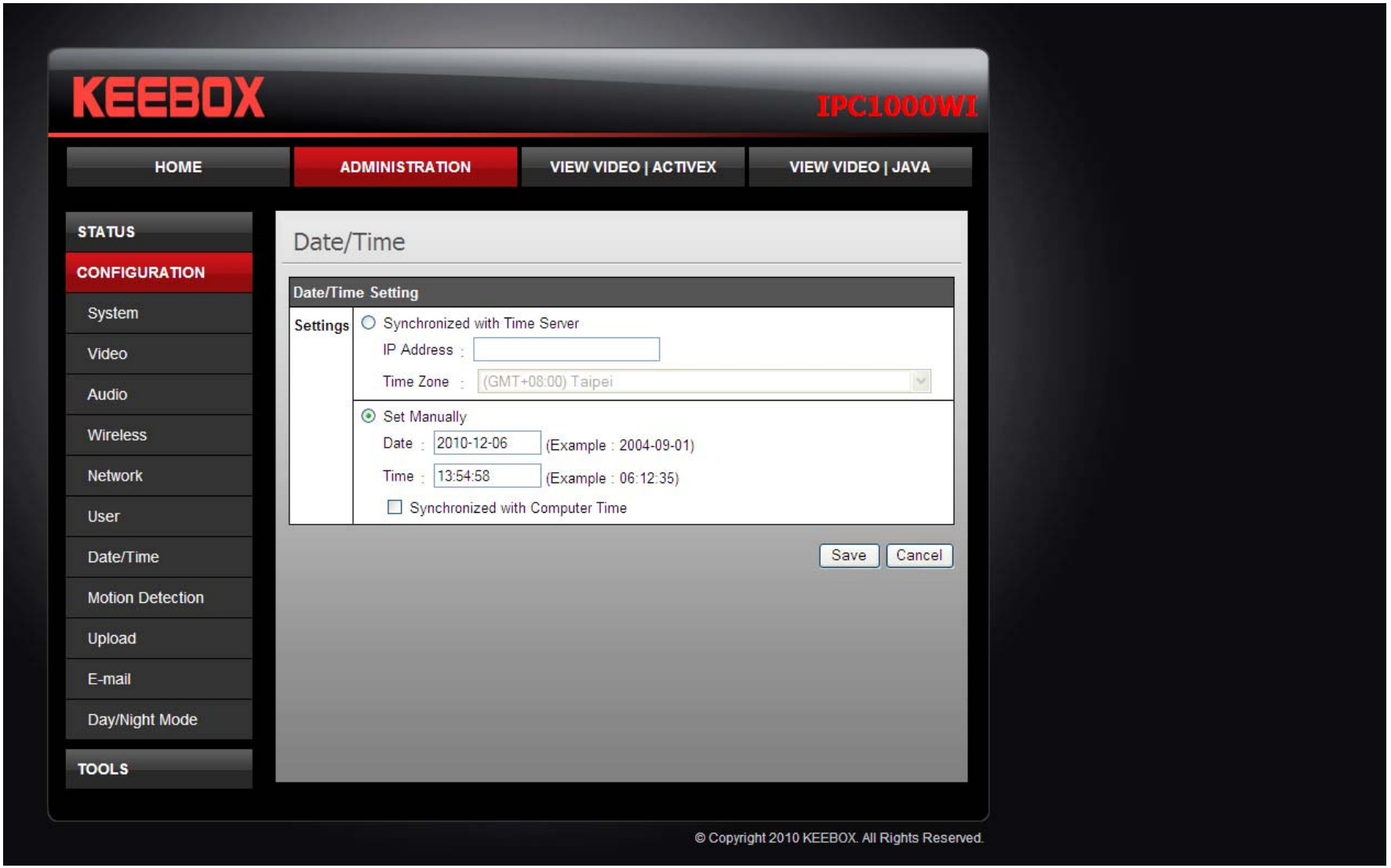
User

- **User Access Control:** Enable this to allow user accounts to connect to the camera.
- **Define Users:** You can create new user accounts here. Enter a user name and password and select whether the user is allowed to upload or email an image from the camera.
- **Delete User:** Select a user from the drop down menu and click the **Delete** button to remove a user account from the camera.



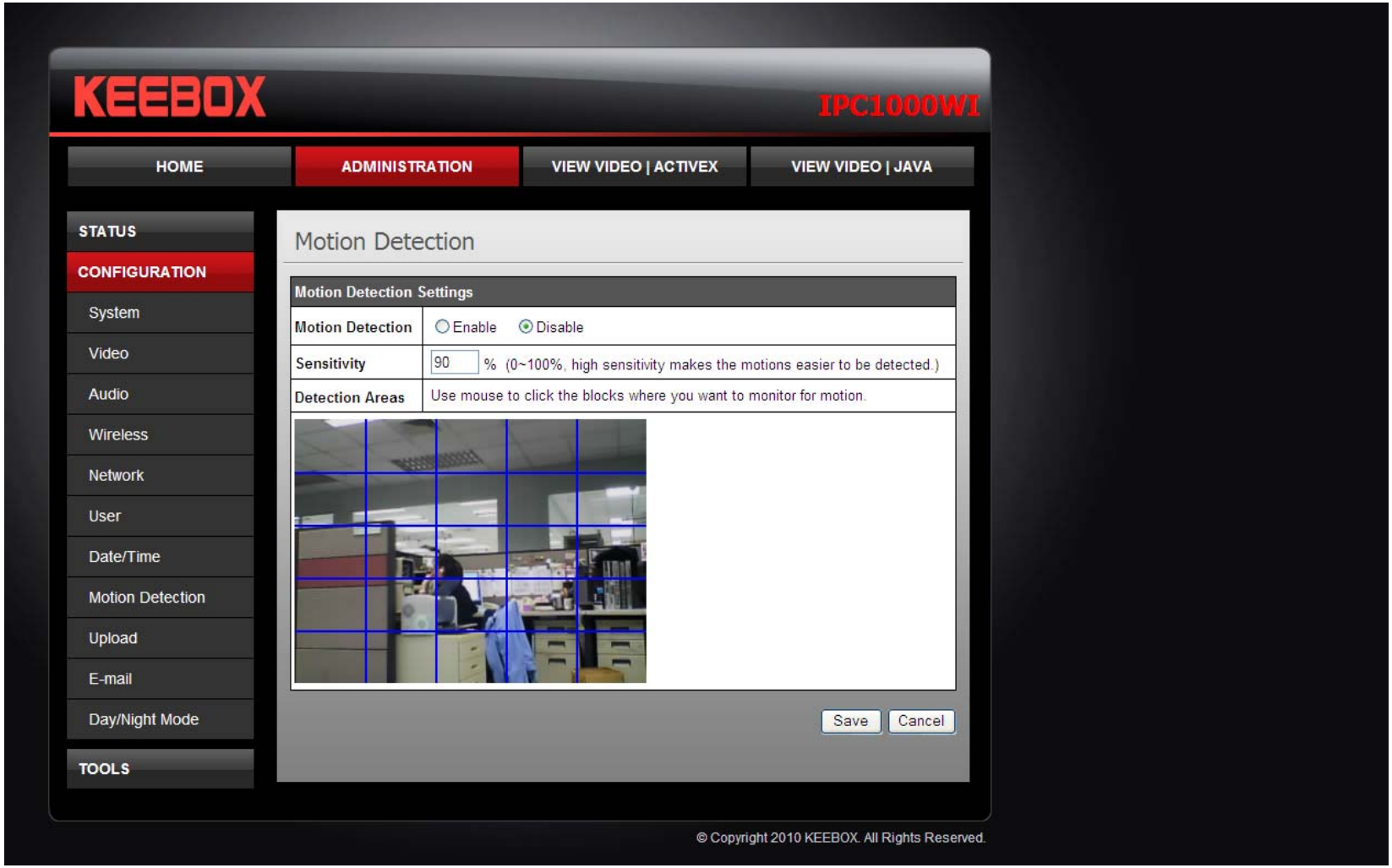
Date/Time

- **Synchronized with Time Server:** If you have an internet time server or have an NTP server designated on your network, you can specify the IP address of it here. Ensure that you select the correct time zone for the camera also.
- **Set Manually:** If you prefer to manually set the time for the camera, select this mode. You can check the box **Synchronized with Computer Time** to set the time on the camera to be the same as the computer you are on.



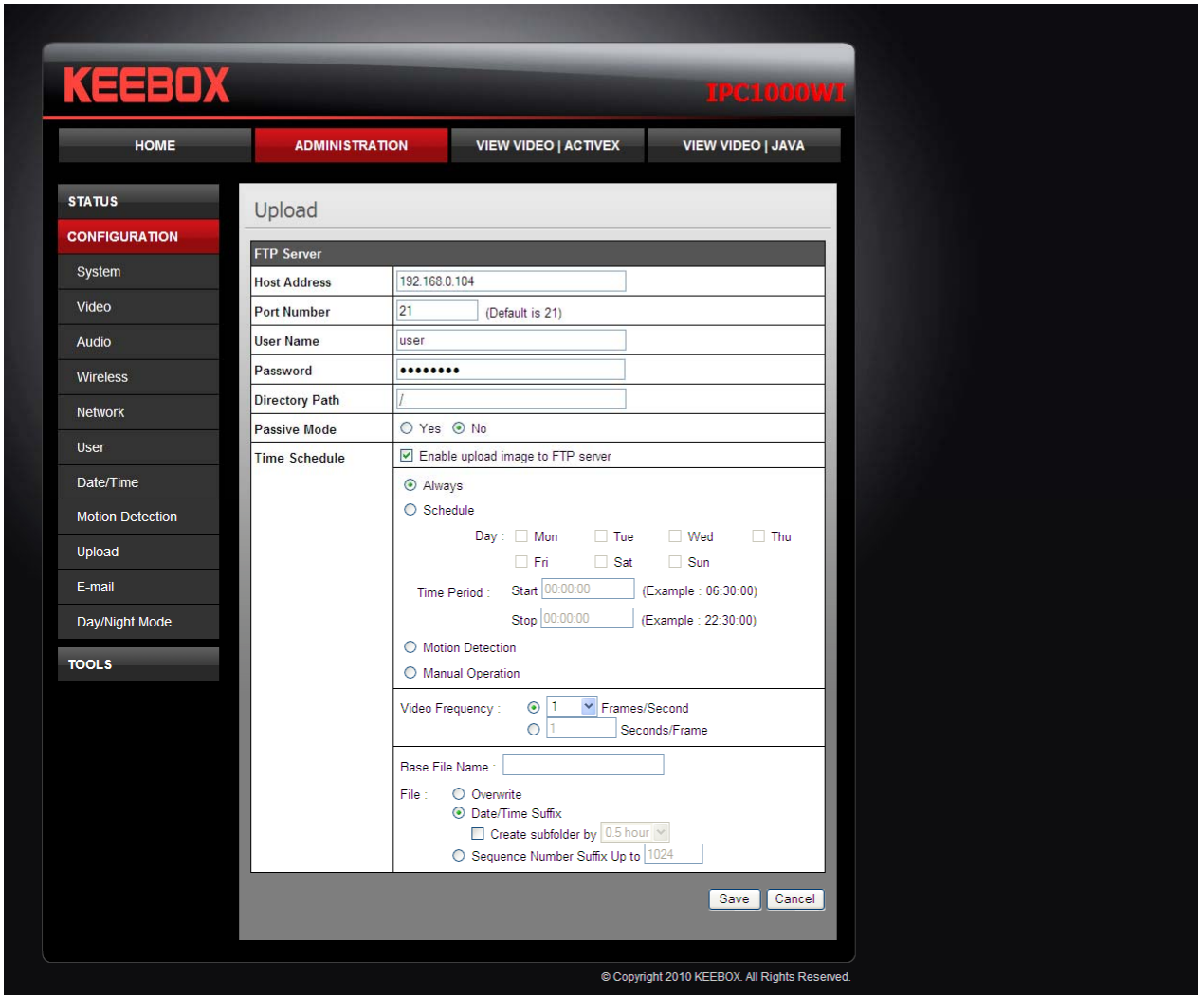
Motion Detection

- **Motion Detection:** Select whether to **Enable** or **Disable** motion detection. This will allow your camera to perform different functions when activity has been detected in the parts of the screen that you specify.
- **Sensitivity:** Set a percentage level to determine how sensitive the camera is to activity.
- **Detection Areas:** From the live image shown on this screen, you can left-click on blocks of the grid shown to indicate which parts of the screen you would like to monitor for motion.



Upload

On this screen you can enter details of an FTP Server that you want to upload images from the camera to.

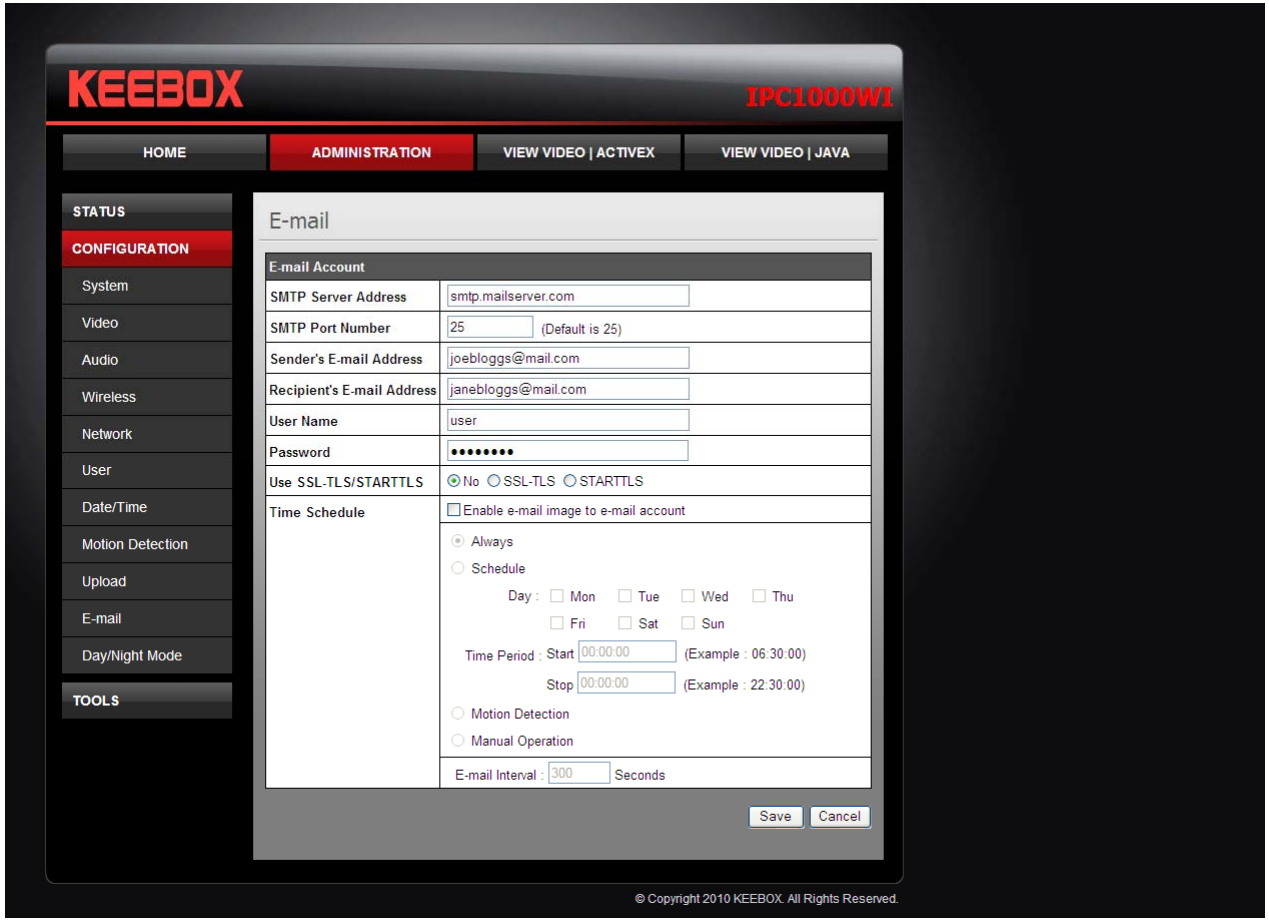


- **Host Address:** The IP address of the FTP Server
- **Port Number:** The port number to connect to the FTP on. The default is port 21.
- **User Name:** The user name of the FTP account.
- **Password:** The password for the user account on the FTP.
- **Directory Path:** The path you want the files to be uploaded to on the FTP.
- **Passive Mode:** If the camera is behind a firewall, you might wish to enable Passive mode to allow the camera to upload the pictures.
- **Time Schedule:** Check **Enable upload image to FTP server** to enable the Upload function.
    - **Always:** Selecting this option allows snapshots to be uploaded to your FTP as soon as you click **Save.**
    - **Schedule:** Selecting this option allows you to configure specific times when you want the snapshots to be uploaded to your FTP server.
    - **Motion Detection:** Selecting this option sets the camera to upload images upon detection of motion.
    - **Manual Operation:** Selecting this option means the user is responsible for taking a snapshot from the camera to upload.

- **Video Frequency:** Users can select in frames per second (1, 2, 3 or auto, in auto this could go to 4). The user can also select a duration for each frame from 1 to 65535 seconds.
- **Base File Name**: Enter the prefix for the filename of each snapshot taken by the camera.
- **File**: If **Overwrite** is selected, only a few images will be constantly refreshed, depending on how many snapshots you choose to have sent. Select **Date/Time Suffix** and the pictures will be named with a date and time also. Select a **Sequence Number Suffix** up to 1024 and all the pictures will be numbered from 1-1024. Up to 1024 pictures can be configured. Picture number 1025 will reset to number 1.

E-mail

This section allows you to configure the email notification settings of your camera.

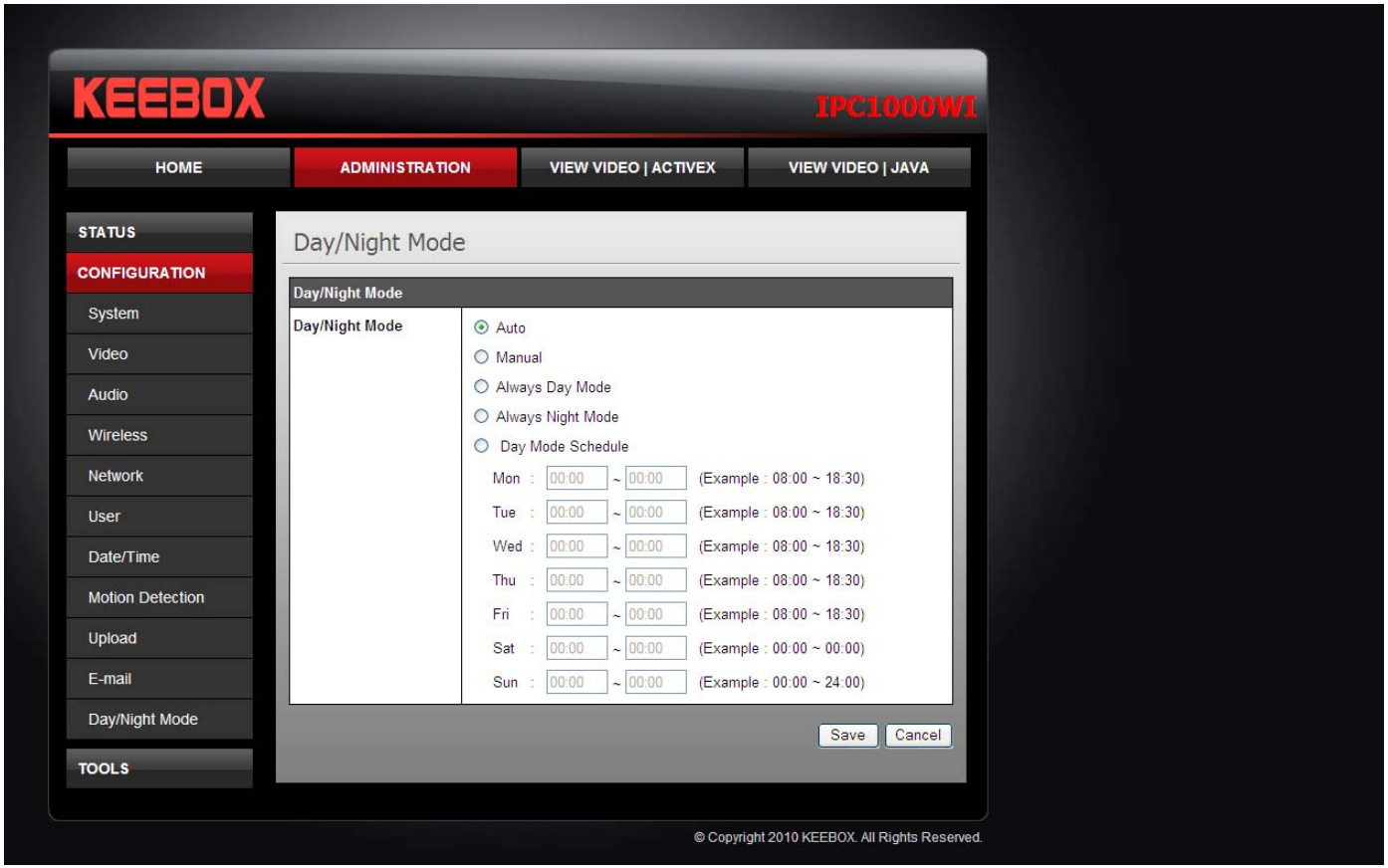


- **SMTP Server Address:** The domain name or IP address of your external mail server
- **SMTP Port Number:** The port number of your mail server, usually this is port 25.
- **Sender's Email Address:** The e-mail address of the person sending the camera snapshots.
- **Recipient's E-mail Address:** The e-mail address of the person receiving the camera snapshots.
- **User Name:** The user name of the sender's email account for SMTP authentication.
- **Password:** The password of the sender's account for SMTP authentication.
- **Use SSL-TLSS/STARTTLS:** If your mail server supports SSL-TLSS or STARTTLS, you can select one of these methods to create an encrypted connection to the mail server.
- **Time Schedule:** Check **Enable e-mail image to e-mail account** to enable the time schedule function.
    - **Always:** Selecting this option will allow snapshots to be emailed when you click **Save**.
    - **Schedule:** Selecting this option allows you to configure specific times when you want the snapshots to be emailed.
    - **Motion Detection:** Selecting this option sets the camera to e-mail images upon detection of motion.
    - **Manual Operation:** Selecting this option means the user is responsible for taking a snapshot from the camera to e-mail.

Day/Night Mode (IPC1000WI only)

The IPC1000WI comes equipped with LEDs to enable the camera to have greater visibility in dark locations. On this screen you can configure when to set the camera to day mode and night mode.

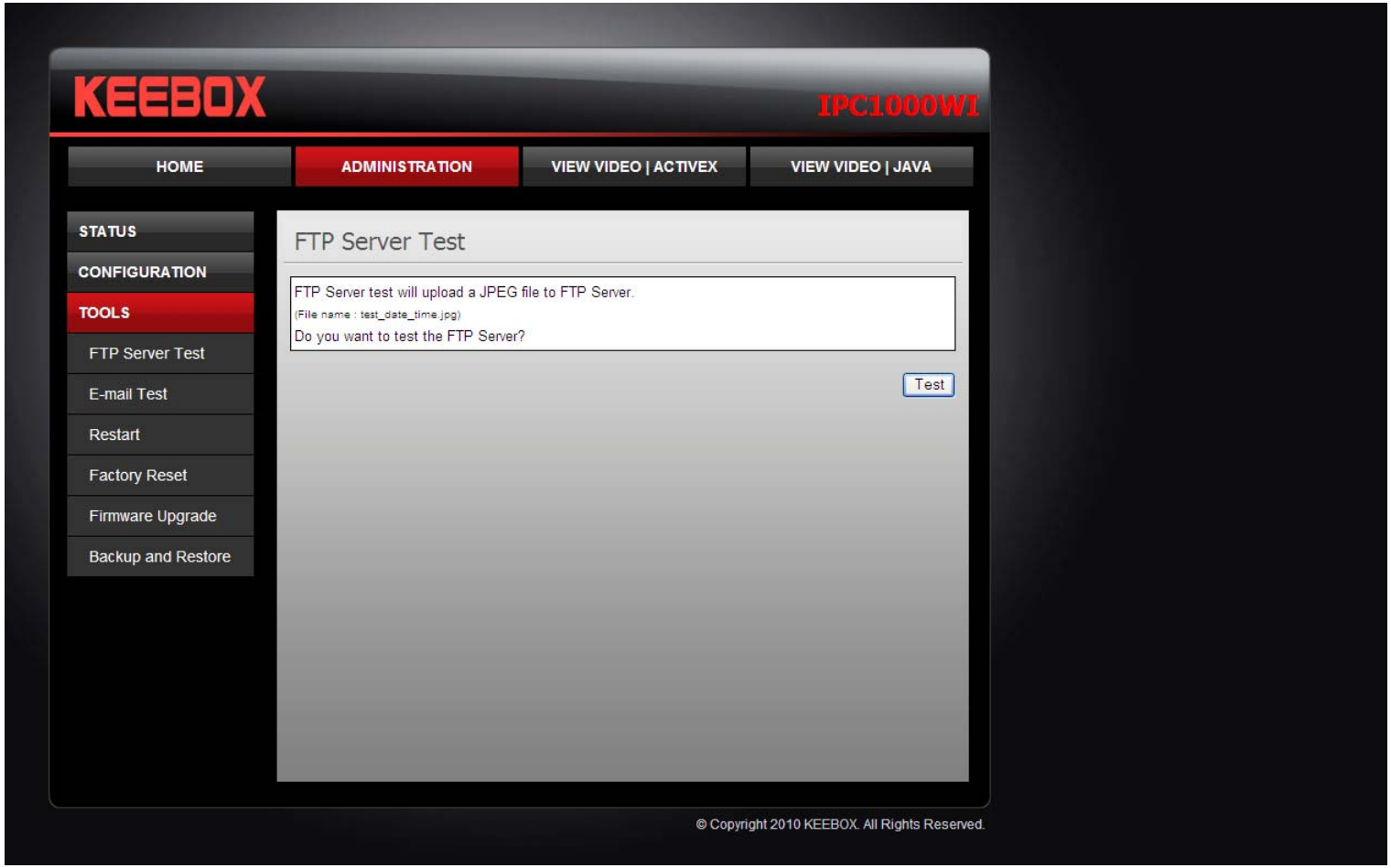
- **Auto:** The camera automatically senses when there is inadequate light and switches to night mode.
- **Manual:** The user must manually change between night mode and day mode from the View Video windows.
- **Always Day Mode:** The camera will always stay in day mode and never switch to night mode.
- **Always Night Mode:** The camera will always stay in night mode and never switch to day mode.
- **Day Mode Schedule:** The user can specify a schedule when the camera is in day mode.



Tools

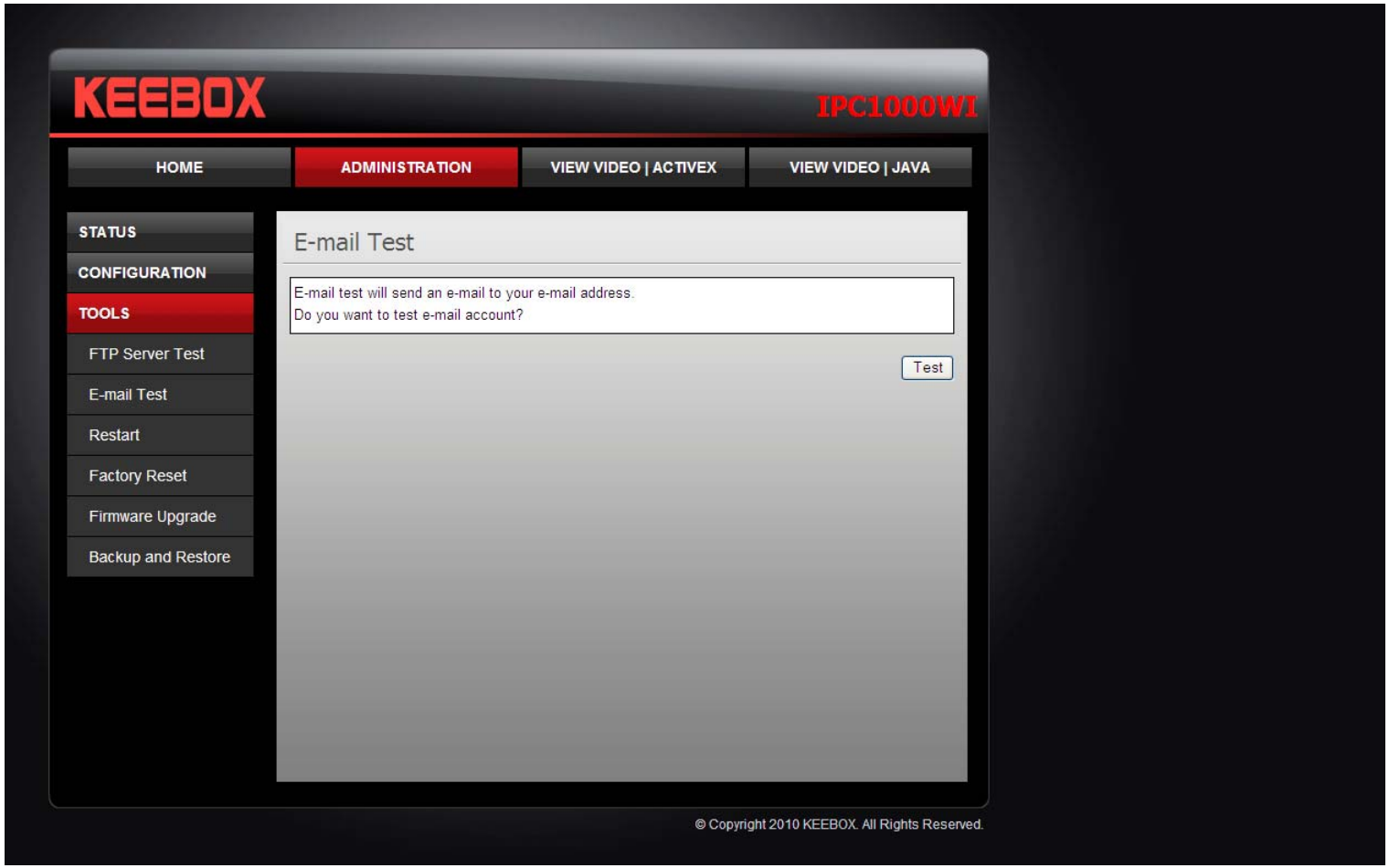
FTP Server Test

When you have set up the FTP Server in the configuration section, you can use this screen to test that the FTP Server settings are correct. Pressing the **Test** button will make a connection to the FTP Server and upload a file called test_date_time.jpg to the FTP. If the file is not there, you should check that you have entered the FTP details correctly in the configuration section.



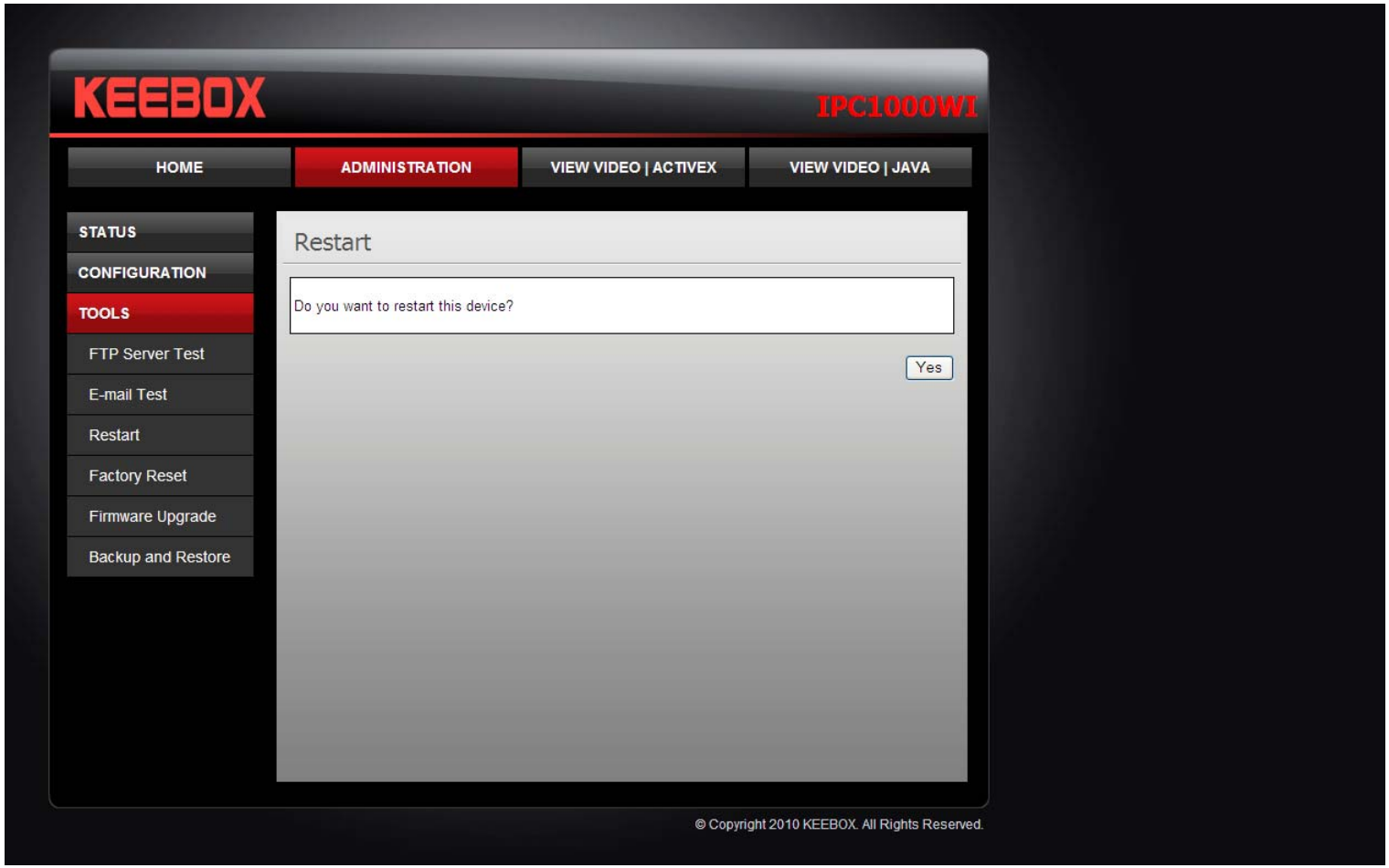
E-mail Test

When you have set up an e-mail account in the configuration section, you can use this screen to test that the E-mail settings are correct. Pressing the **Test** button will make the camera send a test e-mail to the address specified in the configuration section. If you do not receive the test e-mail, you should check that you have entered the e-mail details correctly in the configuration section.



Restart

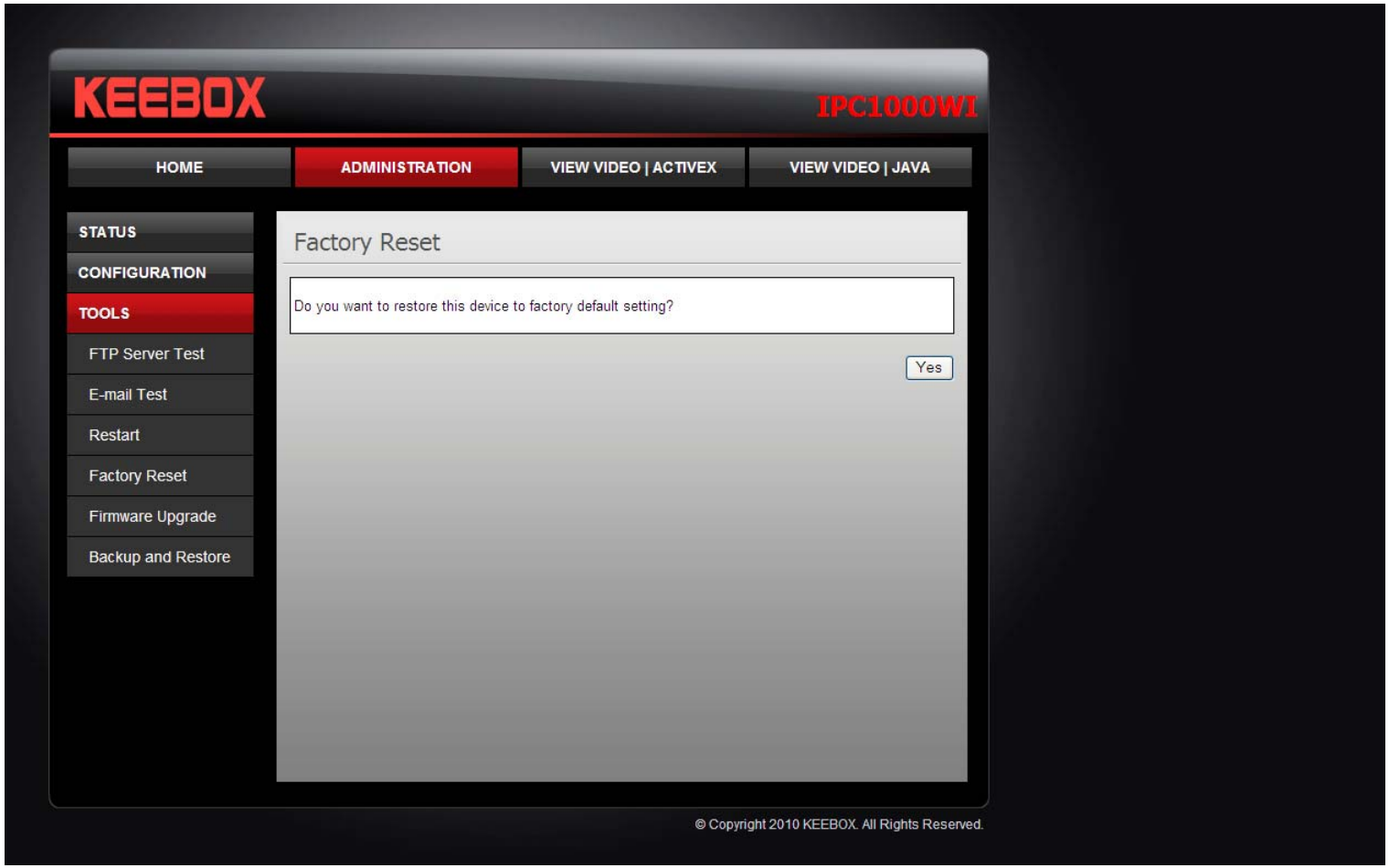
If you should need to restart the IP camera, you can do this from this screen. Clicking **Yes** will initiate a reboot sequence on the camera. When you restart the camera you will lose your connection to it. Wait 1 minute before attempting to reconnect to the camera so that it has time to go through its boot up sequence. Restarting the camera will retain the configuration settings you have entered.



Factory Reset

If you should need to restore the camera to the factory settings, you can do it from this screen. Clicking **Yes** will initiate a reboot sequence on the camera. When the camera restarts, you will lose your connection to it. The username and password will also both be set back to the default **admin**. Wait 1 minute before attempting to reconnect to the camera so that it has time to go through its boot up sequence.

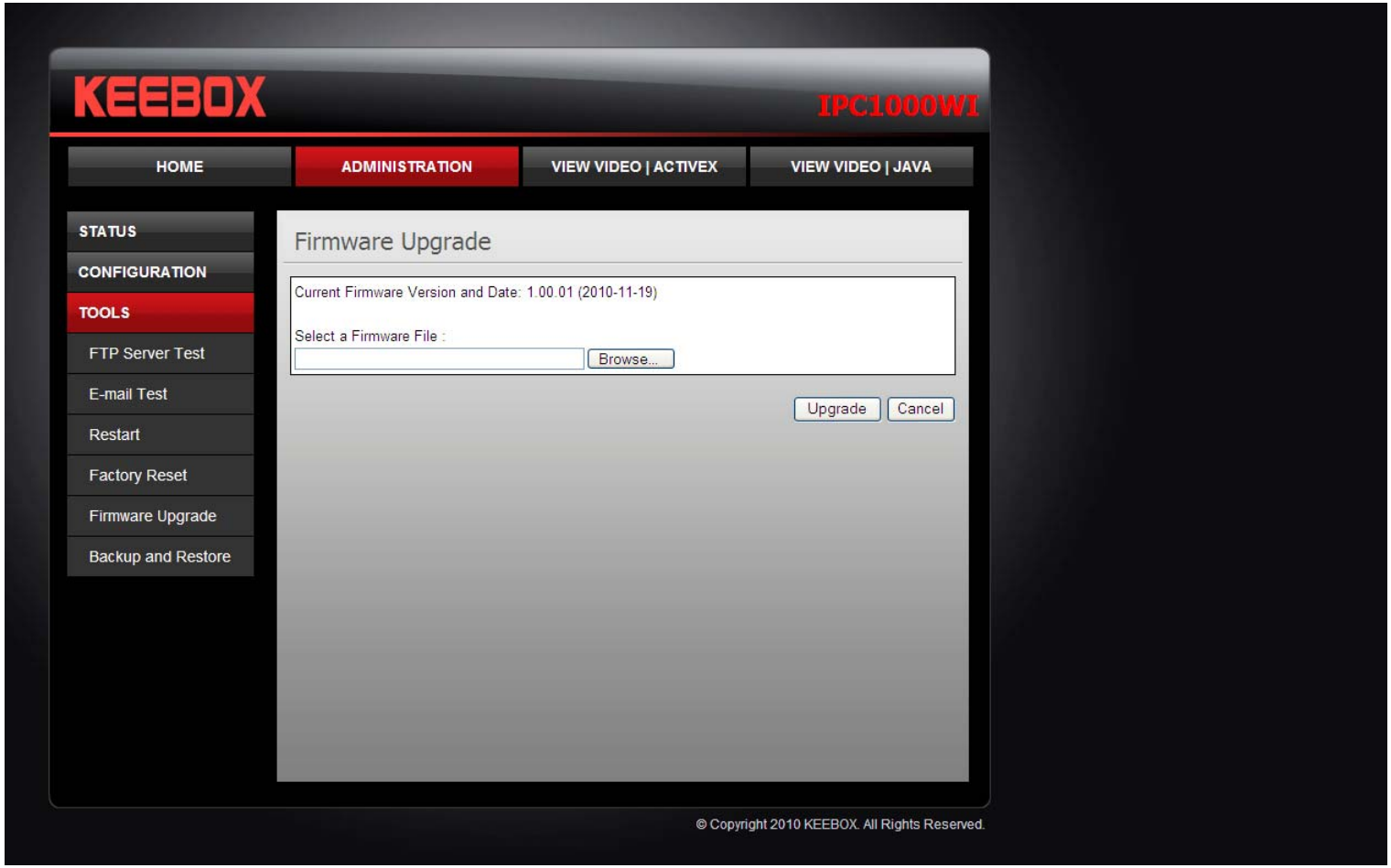
Note: Factory reset will erase the current configuration settings on the camera. You should back up the settings first if you wish to keep them. See the Backup and Restore section for more information.



Firmware Upgrade

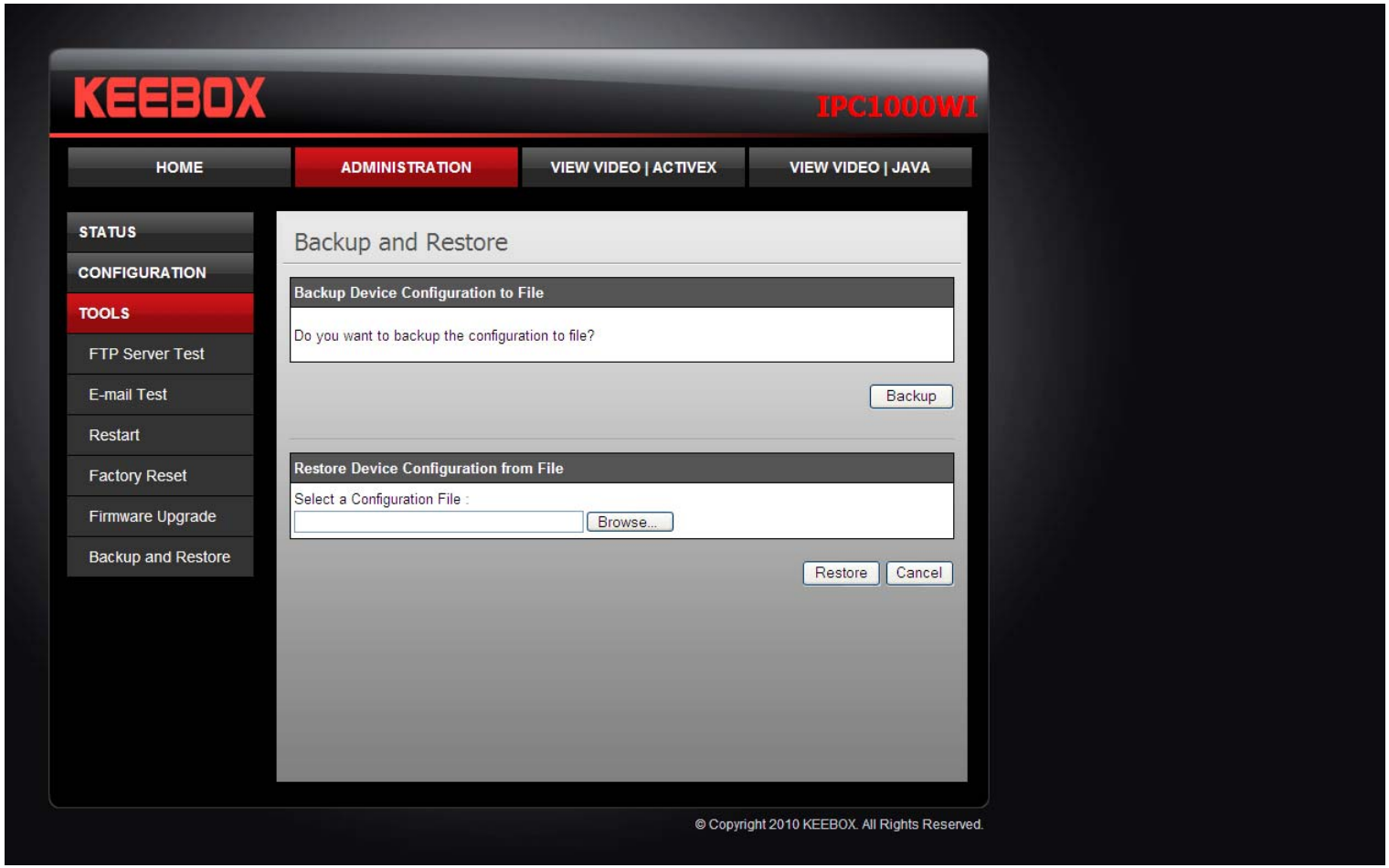
Keebox may occasionally provide new firmware on the Keebox website. If you need to update your camera's firmware you can do it on this screen. Click the **Browse** button and locate the firmware file you saved on your computer and choose **Open**. When you are ready, click the **Upgrade** button to begin the firmware upgrade.

Note: Upgrading the firmware is a sensitive process. Be sure that you have the correct firmware for your model of camera and do not disconnect the power during the upgrade process.



Backup and Restore

When you have set up the camera and you are satisfied with the settings, you can backup the settings to a file for future reference. If you should change the settings and want to revert back to the previous settings, you can do so on this page. To backup the configuration, click **Backup** and select a location to save the file, then choose **Save**. To restore settings from a configuration file, click **Browse** and locate the backup configuration file on your hard drive then click **OK**. Click **Restore** to complete the process.



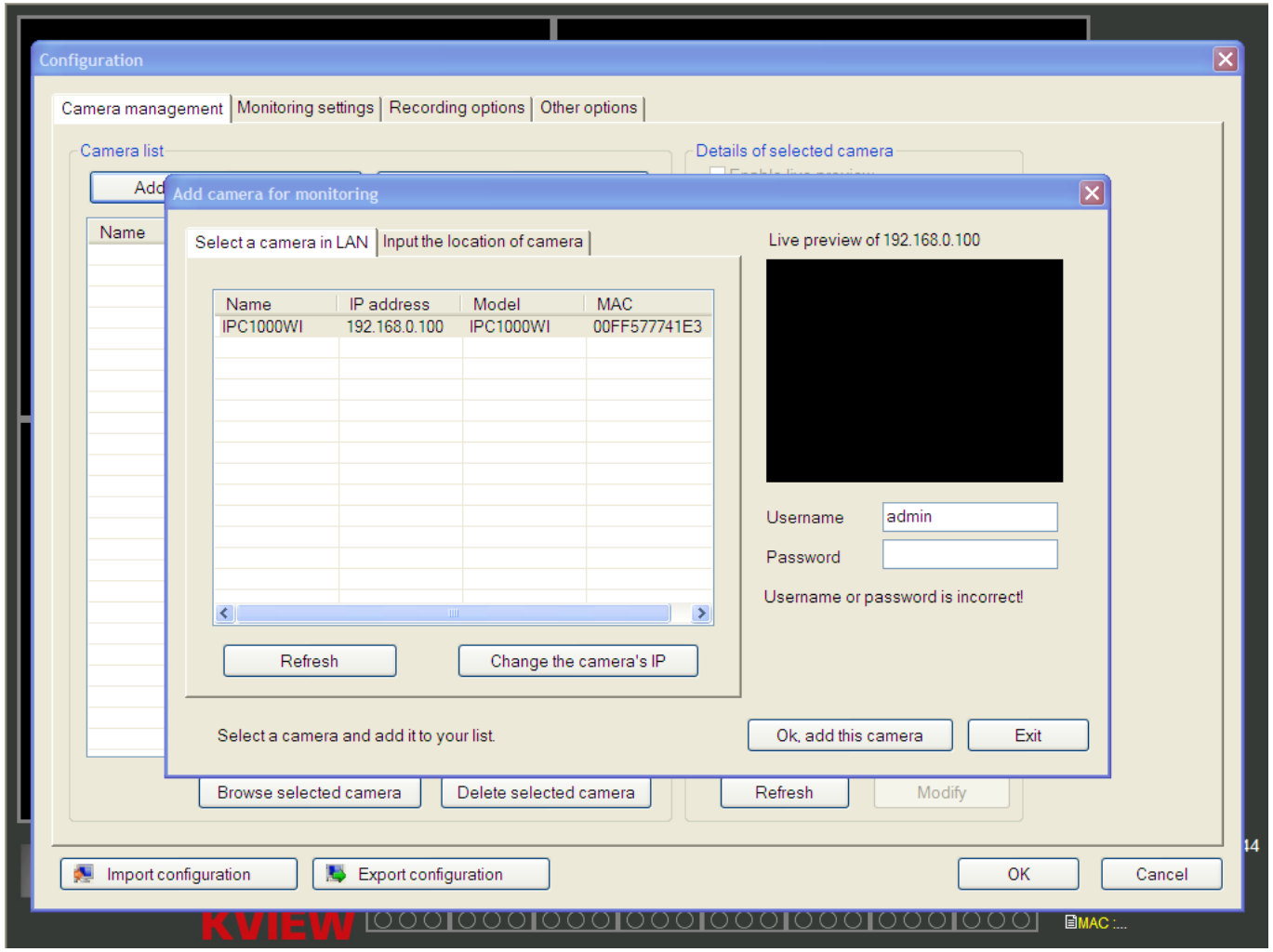
KView Software

This section describes the how to setup a camera using the KView camera monitoring software. To install KView on a system running Windows, launch the KView installation software on the installation CD-ROM and follow the setup instructions. Once the software is installed, the Keebox KView camera monitoring utility is ready for use. Add up to 32 network cameras to monitor using the software. Additional software, Keebox KView Player software is also installed. The KView Player is used for playing recorded video from cameras that have been configured to save recorded files.

Launching KView for the first time

To launch KView, double click on the KView icon on your desktop or go to **Start** > **Programs** > **KEEBOX** > **KView** > **KView**. If this is the first time using the software, the menu that appears is the **Add camera** menu. To add your IP camera:

- Search for the IP camera on the local area network (click on refresh) or
- Import an existing configuration file

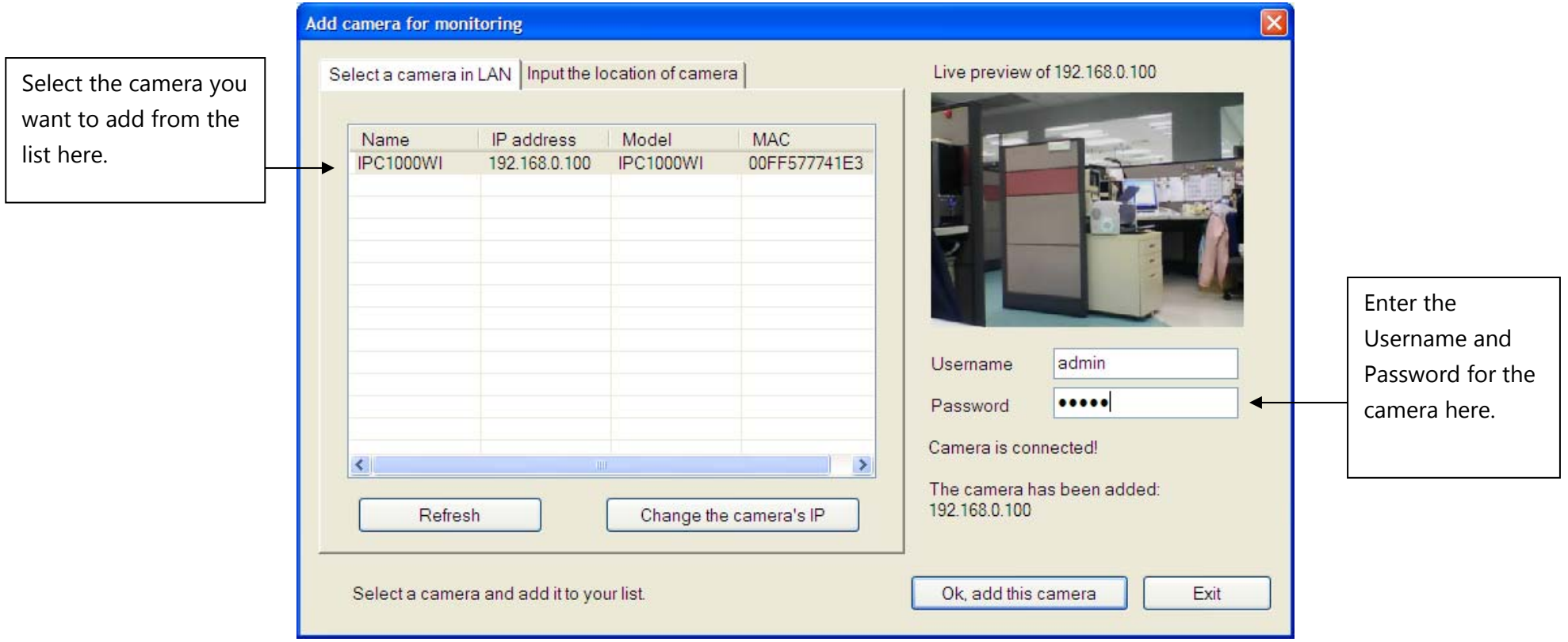


Add a camera for monitoring

The Add camera menu is presented the first time the KView software is launched. This menu is used to add cameras to the user interface for monitoring. After the first time running the software, this menu can be accessed at anytime from the Configuration menus. The Configuration menus are described in a later section of this chapter. Note that the KView software has automatically detected eligible cameras running on the network.

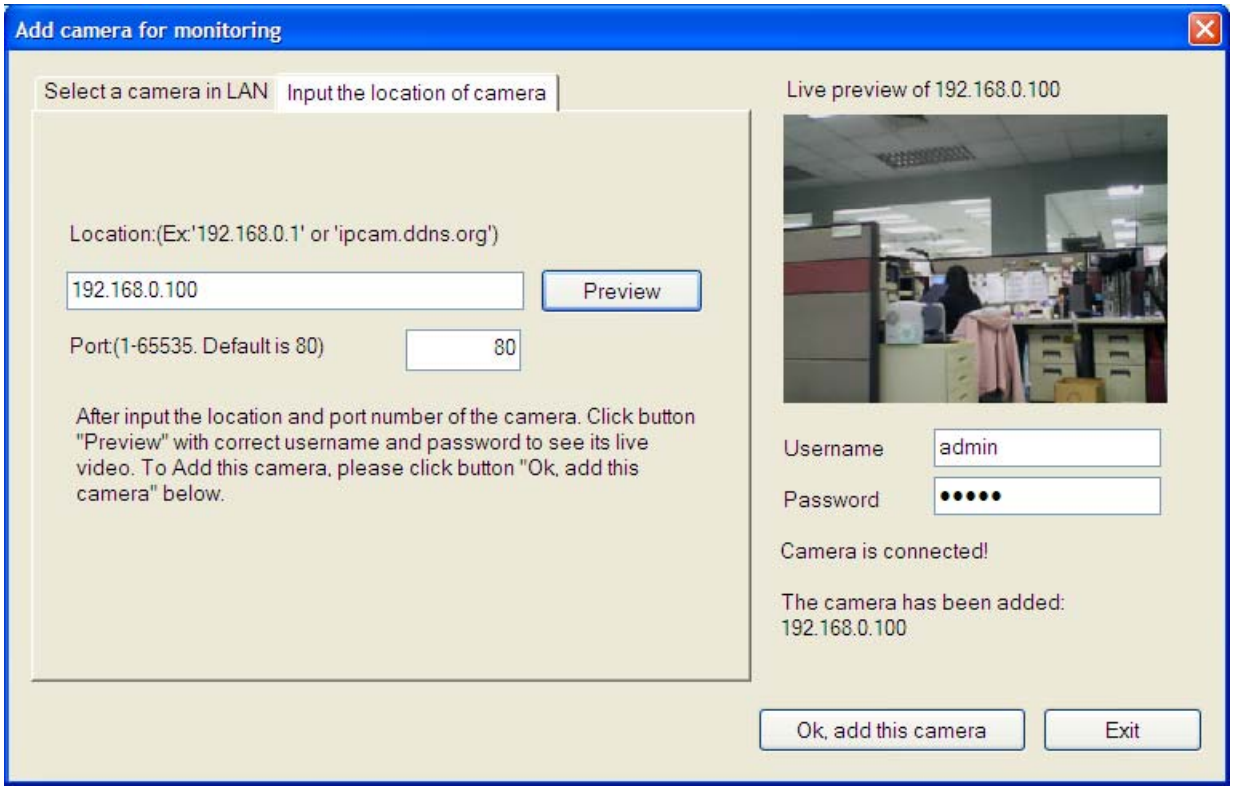
To add a camera to the KView user interface, follow these instructions:

1. Check the list of cameras detected by the software. If the camera you want to add does not appear on the list, click the **Refresh** button to conduct another search. If it still does not appear, check the IP address of the camera and click on the Input the location of camera menu tab and skip ahead to step 2.1.



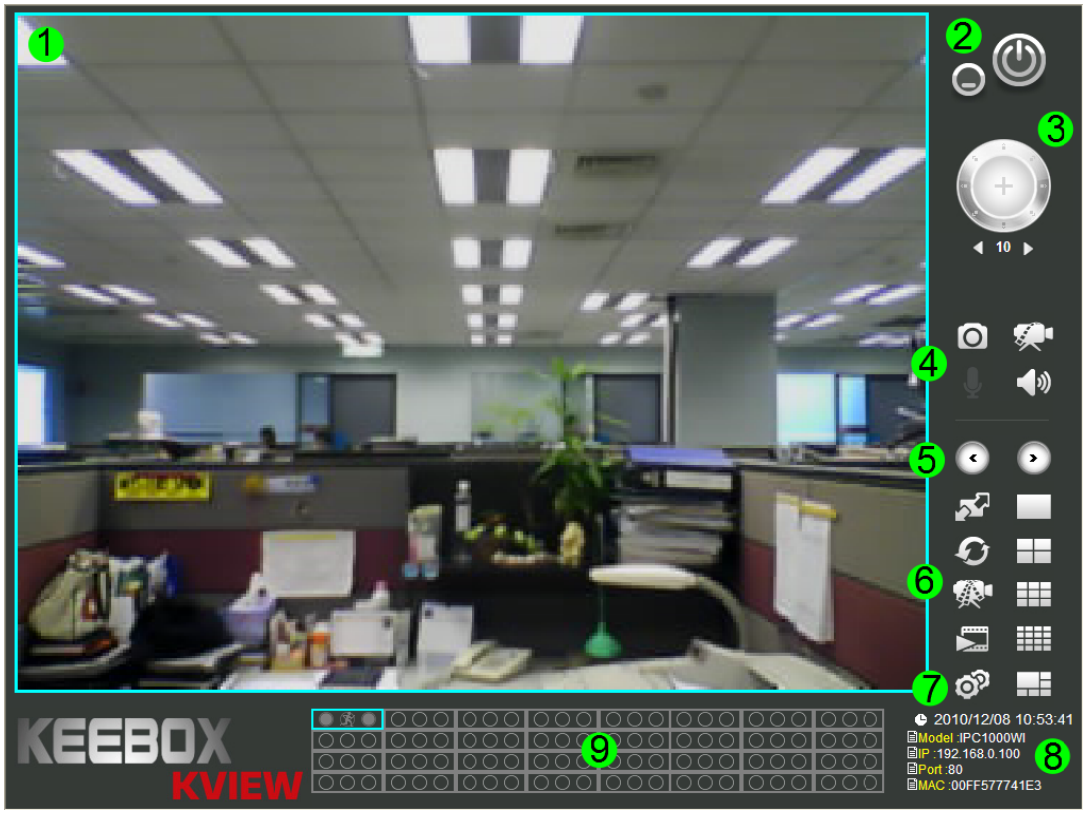
2. Select the camera to add from the list, enter the administrator's user name (ID) and password, a preview of the live video display will appear. Click **OK, add this camera**, a confirmation message informs when the camera is connected and added to the KView monitoring group. Repeat this procedure for all the cameras being added. Click the Exit button after all the cameras have been added.

   If the camera does not appear listed, click the **Input the location of camera** tab above the list to view a new menu. Enter the IP address or the URL (for example, *ipcam.ddns.org*) of the camera being added, type the user name and password and click **Preview** to verify that a link can be established. The live video of the camera should appear in the **Live preview** display. If a link cannot be established, run the Setup Wizard software for the camera and verify the correct IP address. Click **Exit** to return to the main **Add camera menu**.


Add camera for monitoring
Select a camera in LAN
Input the location of camera
Location:(Ex:'192.168.0.1' or 'ipcam.ddns.org')
192.168.0.100
Preview
Port:(1-65535. Default is 80)
80
After input the location and port number of the camera. Click button "Preview" with correct username and password to see its live video. To Add this camera, please click button "Ok, add this camera" below.
Live preview of 192.168.0.100
Username
admin
Password
Camera is connected!
The camera has been added:
192.168.0.100
Ok, add this camera
Exit

3. Once the cameras have been added, they are ready to be used in the main KView user interface. Close the Add camera menu (click **Exit**) to go to the main user interface. See below for a description.

KView User Interface



Number	Item	Description
1	Live Video Display	Display area for single or multiple camera video feeds. You can right click on the video display area to bring up a context menu allowing you to toggle different functions.
2	Minimize and Exit	Used to minimize KView or exit the application.
3	Not used	Not used for this camera model
4	Snapshot, record and audio controls	Used to take snapshots, record video and control the microphone on the camera. See below for more information.
5	Switch Active Camera Controls	These controls are used to cycle through the displayed camera when using single viewer mode.
6	Live Video Display Controls	Used to change window display configuration, change scan mode, record, playback and show full screen video.
7	Camera Configuration Menu	Used to add and remove cameras, change monitoring settings including schedules and motion detection, change recording options and other system settings.
8	Camera Information	Displays general information about the selected camera.
9	Camera Status	Displays the current status of the added cameras.

Display Controls

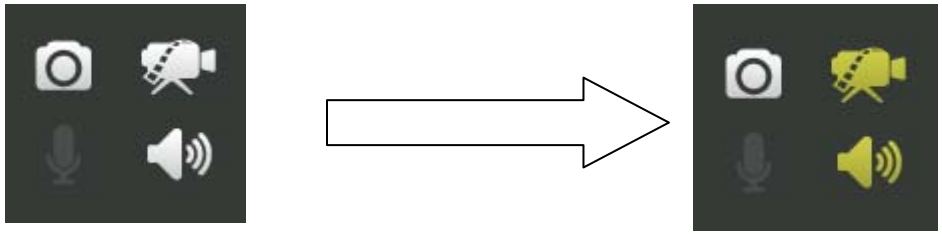
The primary display and KView control icons are described in detail below. When there are more than one camera displays viewed, one of the displays can be selected for management or additional changes. Simply left click on any display to select it. Notice the border around the display is blue, indicating the "selected" status. For example, to go to a single screen display for any one camera, select the camera and click on the **1 Viewer Mode** button.

Snapshot, recording and audio controls

The still photo camera icon is used to take a snapshot of the selected live video display. The video camera icon is used to begin video recording of the selected live video display. Snapshot and video files are stored in a default folder on the administrator's system, or in a folder designated by the administrator under the Camera Configuration Menu > Recording Options tab.

The audio controls are represented by a microphone icon to activate the internal mic or the auxiliary audio input (if present), and a speaker icon for the audio output (remote speakers, if present).

Notice that when these functions are activated, the color of the icon changes from white to yellow.



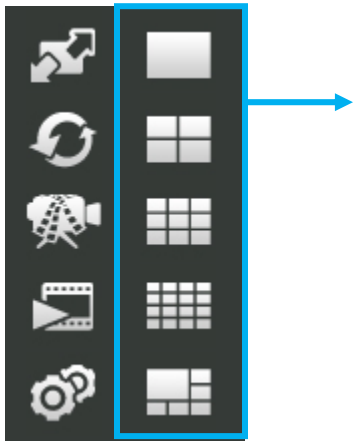
Inactive Video and Audio controls

Active Video and Audio controls

Switch Active Camera Controls

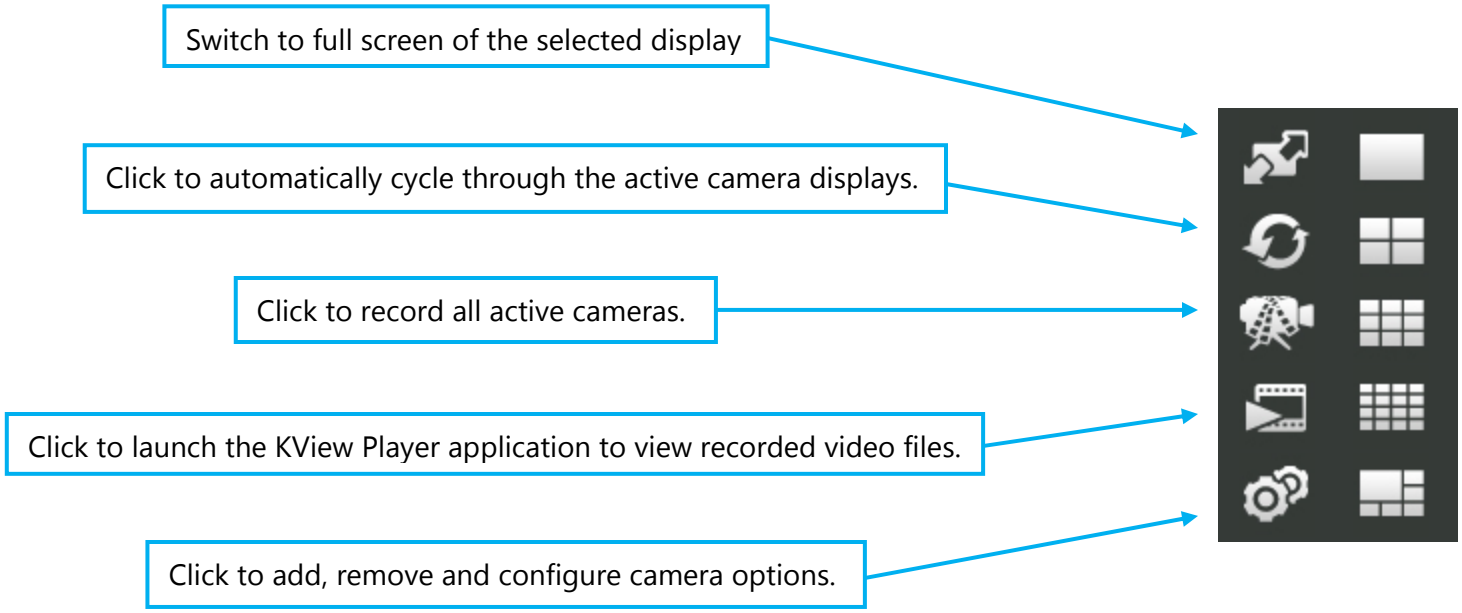
These controls are used to cycle through the displayed camera when using single viewer mode.

Live Video Display Controls



Click multi-screen display icons to change the number of camera's displayed at one time.

To change the order in which the camera displays appear in the interface, move the cursor over a display you want to change and right click. A dialog appears (see example below). The top option in the context menu allows the user to *Replace content by …* followed by a list of connected camera IP addresses (or URL locations). Select the camera display you want to occupy the position the cursor is placed over. The display position will then be swapped with the chosen camera.


Switch to full screen of the selected display
Click to automatically cycle through the active camera displays.
Click to record all active cameras.
Click to launch the KView Player application to view recorded video files.
Click to add, remove and configure camera options.

Camera Configuration with KView

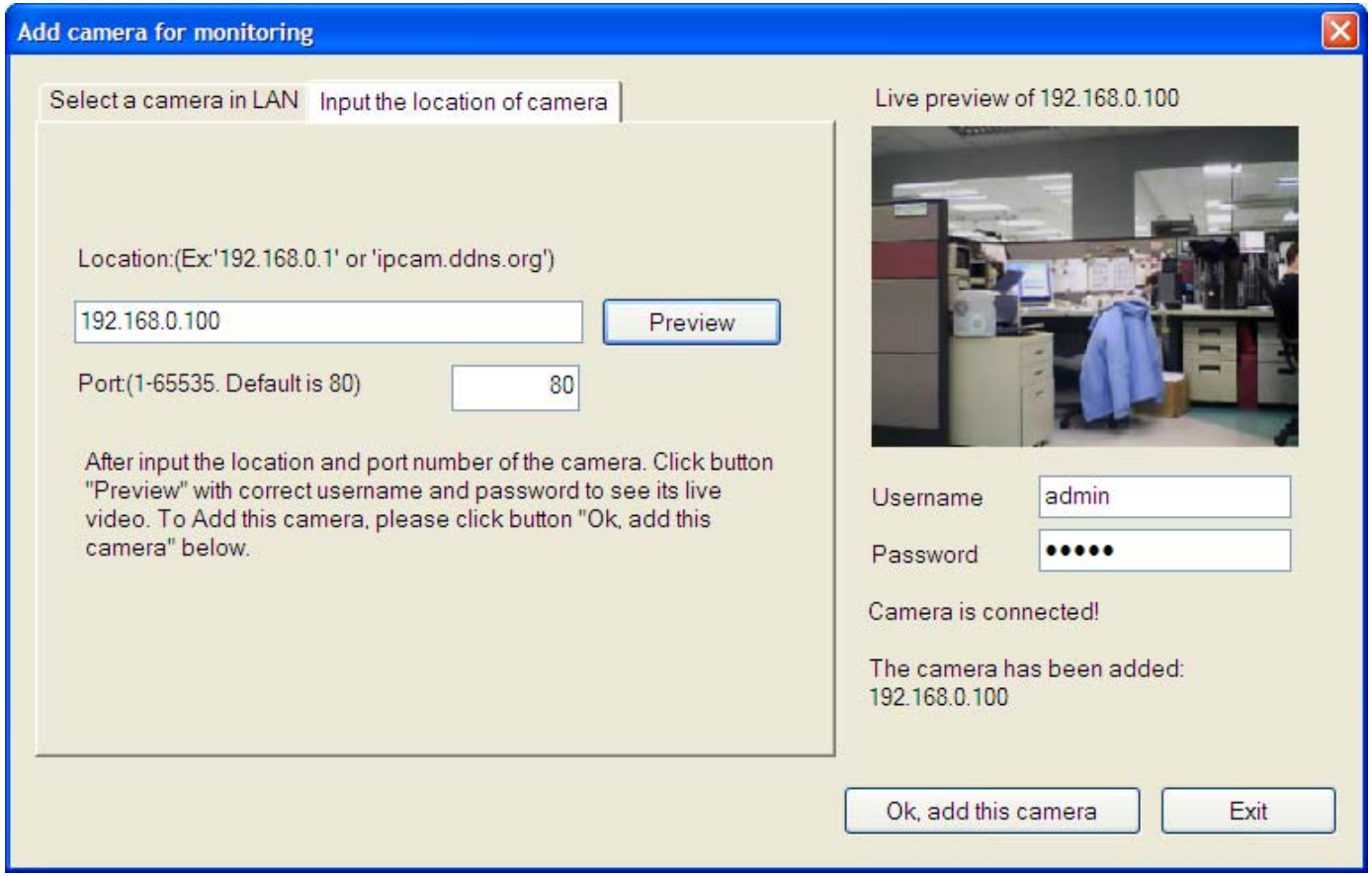
Access the camera configuration menus by clicking on the gear icon at the bottom of the right hand panel of the KView user interface. Configuration options include adding and deleting cameras from the display view, configuration of motion detection and digital input with schedules, recording options, email alerts and other network settings.

Adding a Camera – Camera management

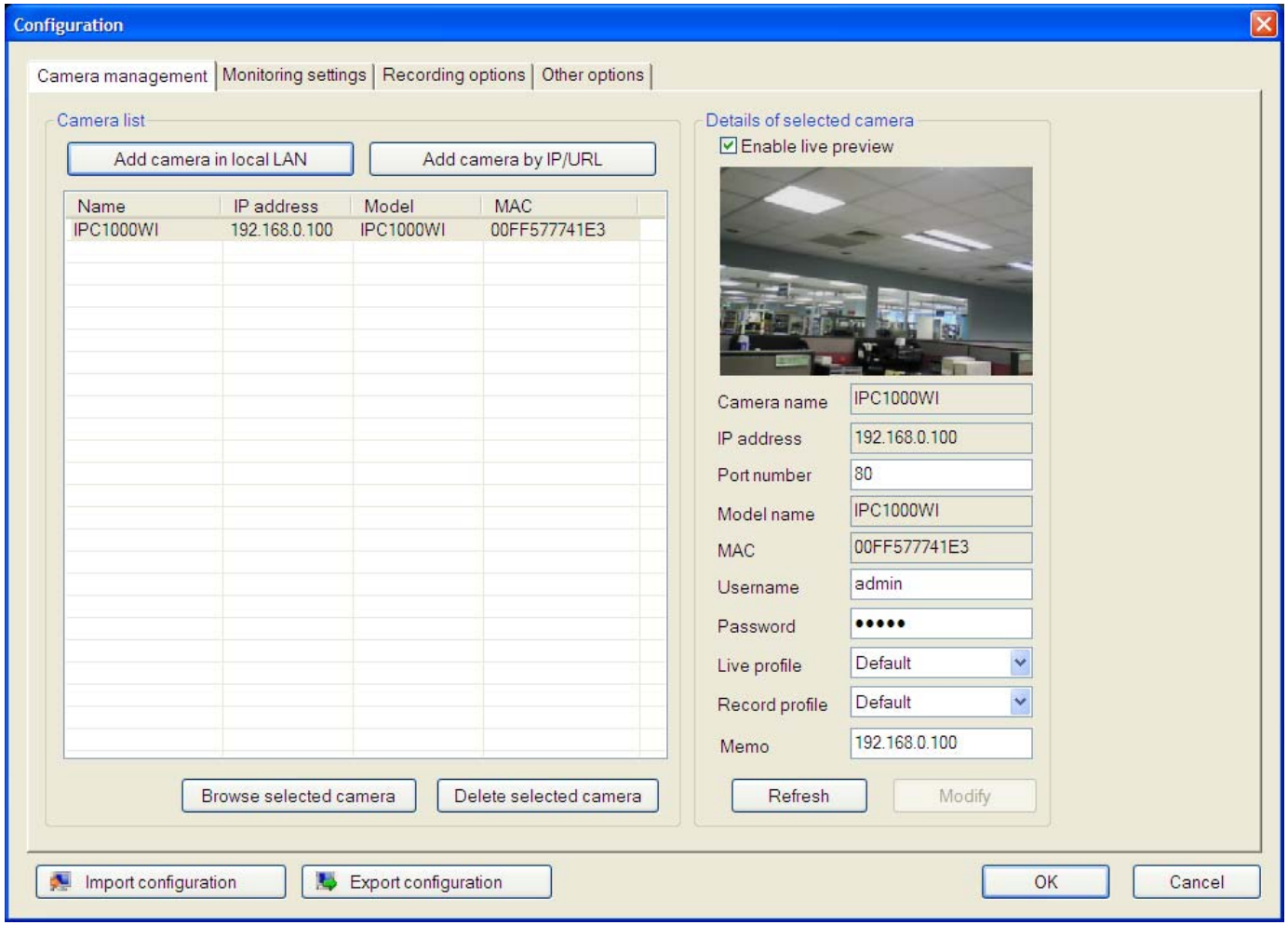
The procedure to add a camera after the initial launch of the software is very similar to the procedure used during the first setup. Follow the instructions below to add cameras.

To add a camera:

1. Click the Configuration icon to view the Camera Setup menu. At the top of the Camera management tab, **Click the Add Camera by IP/URL**.
2. If you know the IP or URL of the camera, enter it in the field on the *Input the location of camera* tab and then enter the port number. Enter the username and password on the right side of the screen and click **Ok, add this camera.** If you do not know the IP address or URL of the camera, click the *Select a camera in LAN* tab and select the camera from the list. Enter the username and password for the camera on the right side of the screen and click **Ok, add this camera**.


Add camera for monitoring
Select a camera in LAN
Input the location of camera
Location:(Ex:'192.168.0.1' or 'ipcam.ddns.org')
192.168.0.100
Preview
Port:(1-65535. Default is 80)
80
After input the location and port number of the camera. Click button "Preview" with correct username and password to see its live video. To Add this camera, please click button "Ok, add this camera" below.
Live preview of 192.168.0.100
Username
admin
Password
Camera is connected!
The camera has been added:
192.168.0.100
Ok, add this camera
Exit

3. The camera added now appears in the Camera List. To launch the web manager for the newly added camera or any camera in the active camera list, select it and click the **Browse Selected Camera** button.



Removing a Camera

To remove the camera from the list of active:

1. Select the camera you want to remove.
2. Click **Delete Selected Camera**.

NOTE: Any camera display can be removed from the main KView user interface by right-clicking on the display screen for the camera and selecting the **Remove this Camera** option.

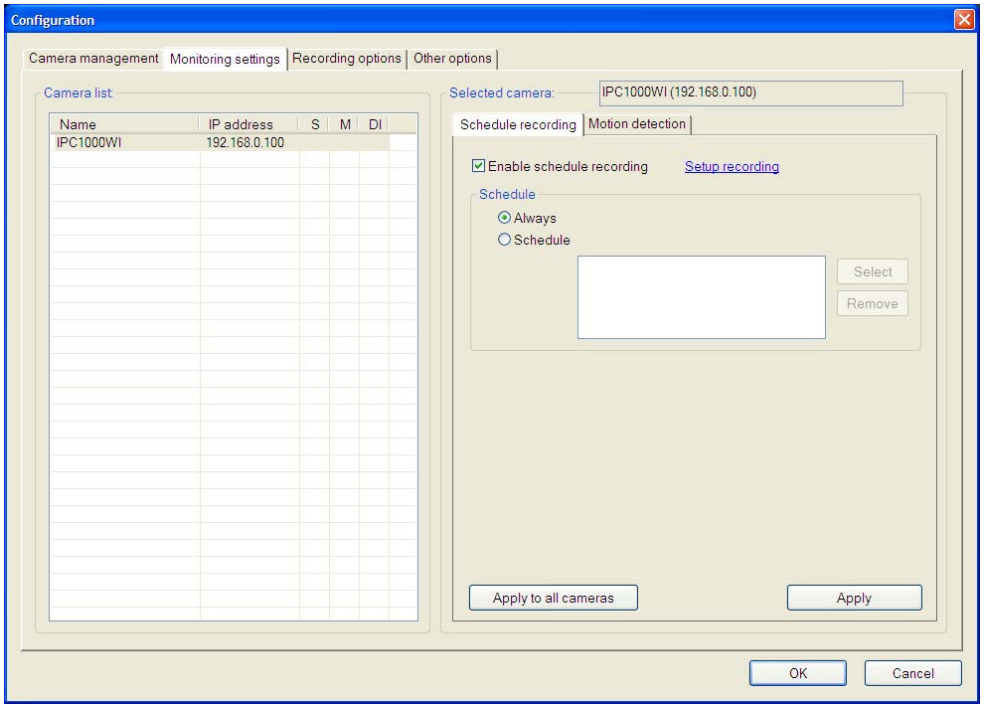
Launch Web Manager for Selected Camera

To launch the web-based IP Camera manager for any active camera in the list, simply select it and click the **Browse Selected Camera** button.

Schedule a recording with Keebox KView

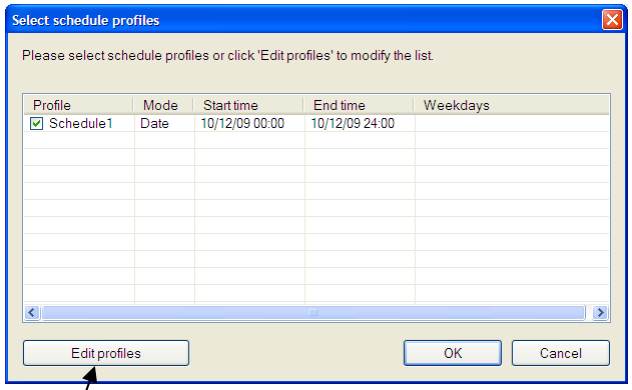
Use the **Monitoring Settings** menu to create schedules for recording and apply the schedules to any camera. Click the **Monitoring Settings** tab to view the **Schedule Recording** menu (the first menu viewed in the Camera Settings menu tab).

To apply an existing schedule template, click the **Enable schedule recording** checkbox then click the **Select** button and choose a schedule from the list of previously created schedules by checking its checkbox and click the **OK** button. If a new schedule is needed it can be created by clicking the **Select button** and then the **Edit profiles** button in the **Select schedule profiles** dialog box.

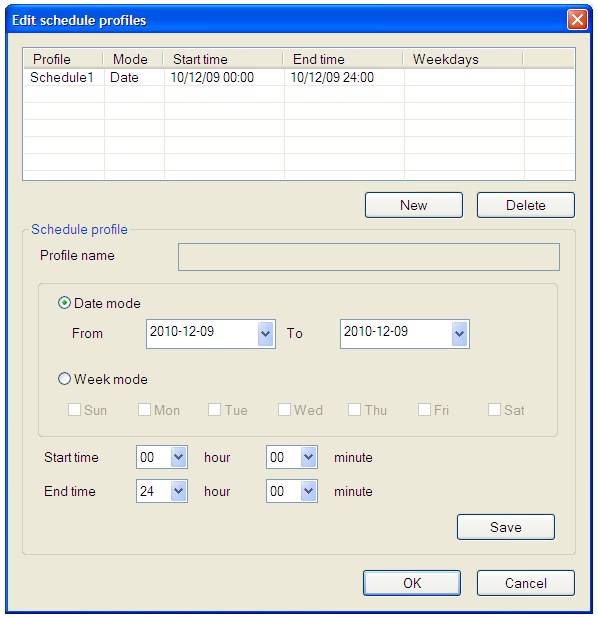


Create Schedule Templates

To make a new schedule template, click the **Edit Profiles** button to view the Edit schedule profiles dialog box. Use this new dialog box to create new schedules for recording. Try to give the new schedule a unique name that describes when the schedule applies. Click **Save** when you are done.



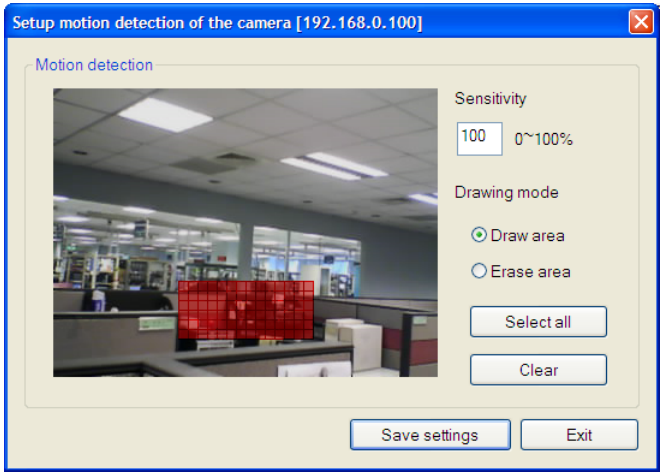
Click **Edit Profiles** to edit or create a new schedule.



Setup Motion Detection with KView

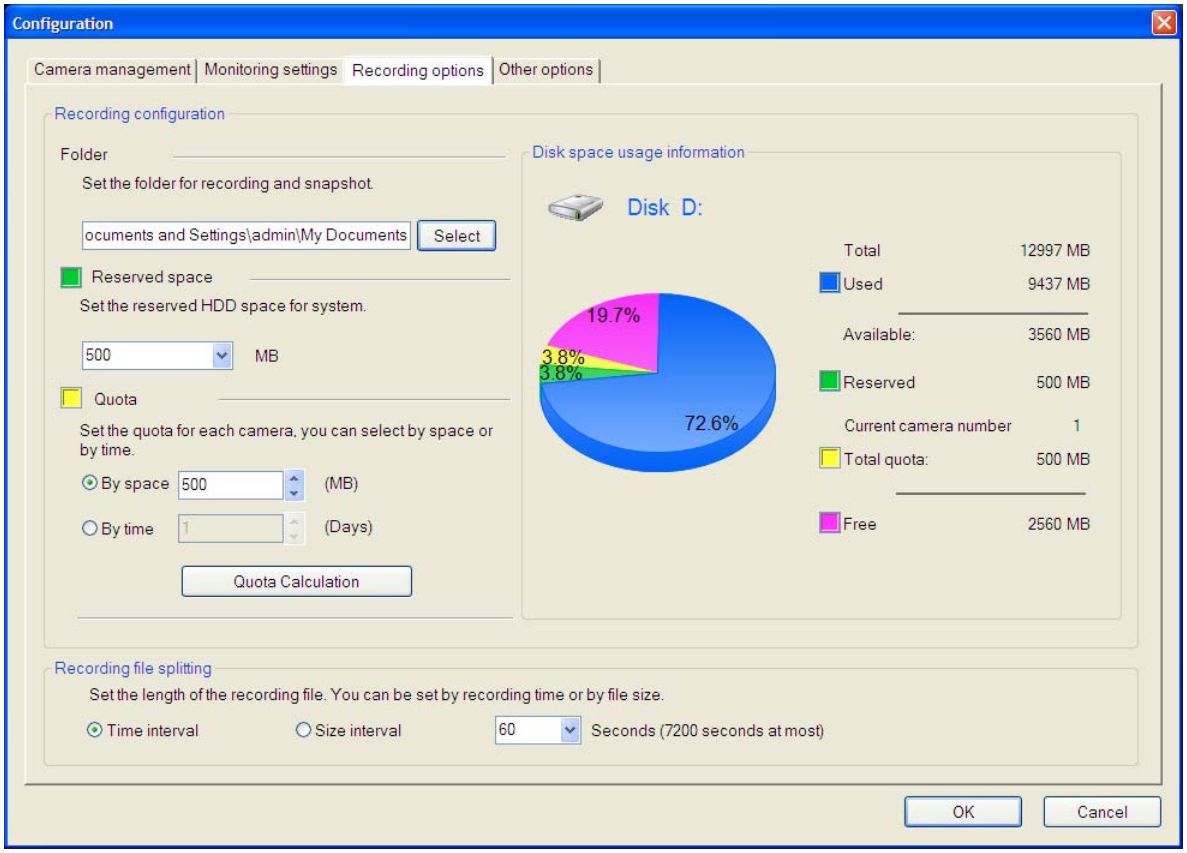
To setup motion detection on the camera, go to the **Monitoring Settings** menu and select the **Motion Detection** tab. Check **Enable motion detection**. The *Setup motion detection of the camera* window appears.

Select an area of the camera's view that you would like to monitor for movement by left-clicking to select the parts of the screen you want to monitor and enter a sensitivity percentage value.



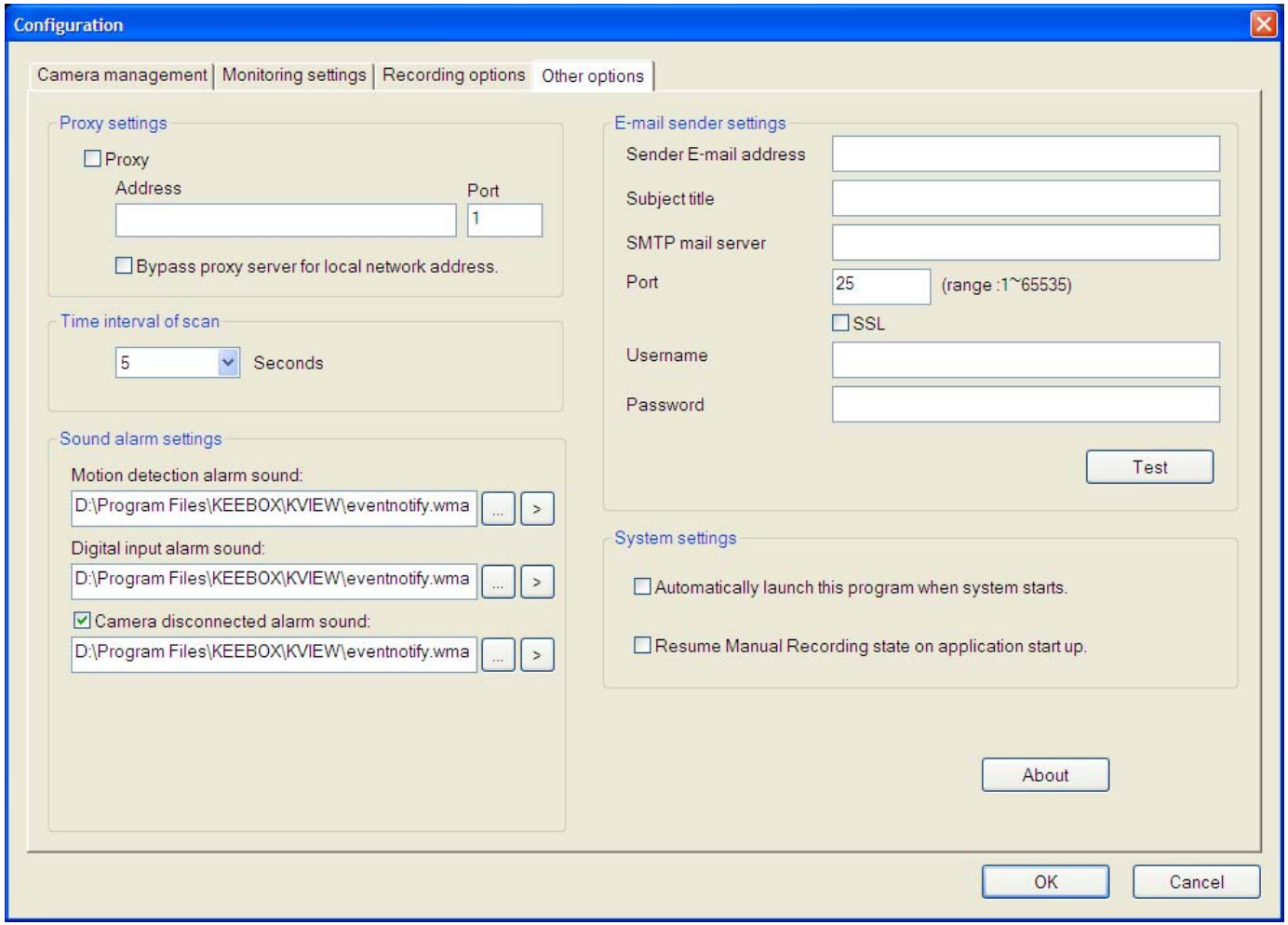
Recording Options

The Recording Options configured in KView help to conserve and manage allowed memory storage (disk space) and for video file management. Recorded files can be limited by time elapsed or by size. Use the **Select** button to choose an alternative destination for stored video files. Storage limits can be set for each camera by time elapsed or hard disk space allowed. A limit can also be placed for the system and all cameras used in KView.



Other Options

Other options available include Proxy settings, Time interval of scan, Sound alarm settings, E-mail sender settings and System Settings.

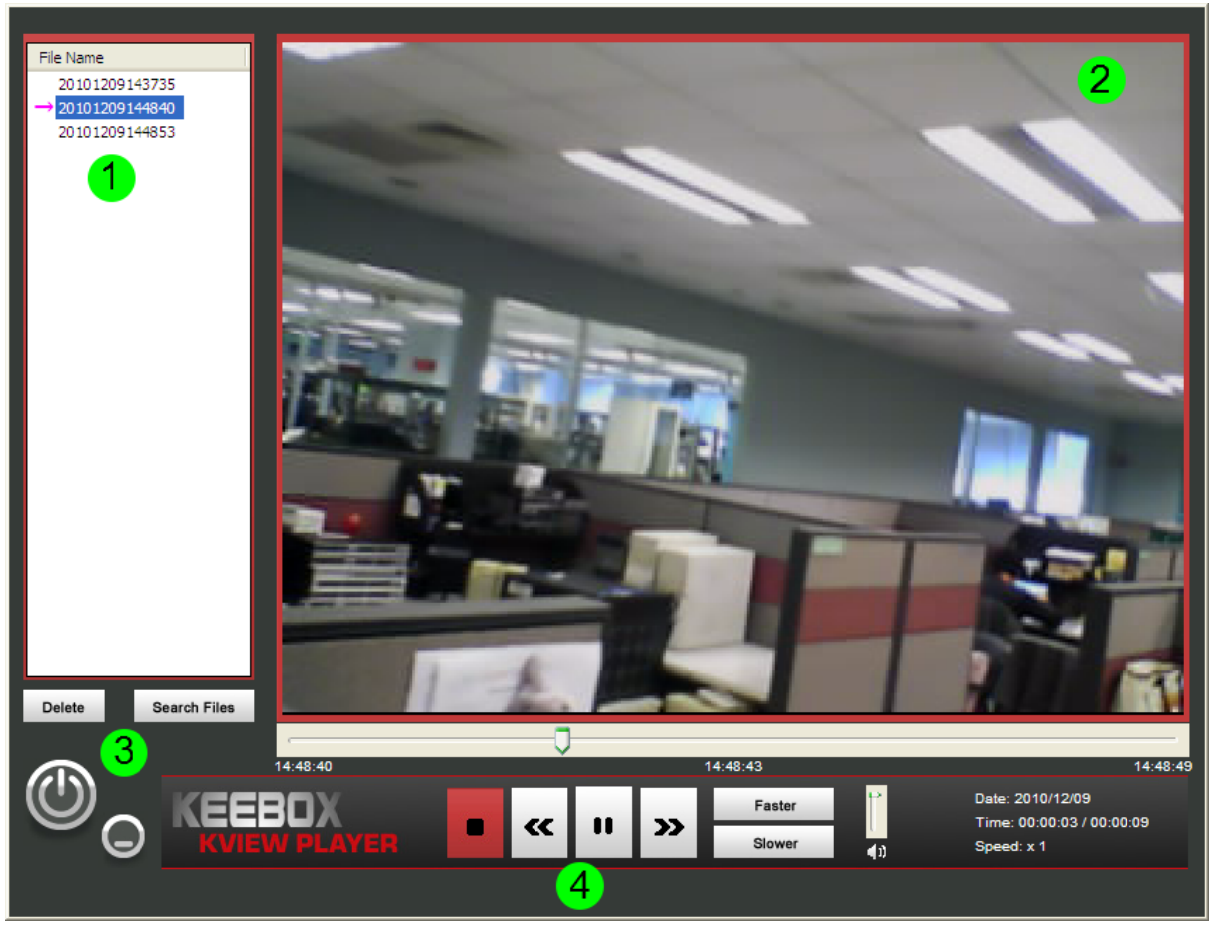


KView Player

KView Player is installed along with the monitoring KView software as described earlier. KView Player is designed for playing back recorded videos.

To Start KView Player click **Start** > **Programs** > **KEEBOX** > **KView** > **KVIEWPLAYER** or launch it from the control panel of KView. When it starts, the KView Player will automatically scan your recordings folder for any new recordings. The recording folder is designated in the KView software as described previously.

KViewPlayer Interface

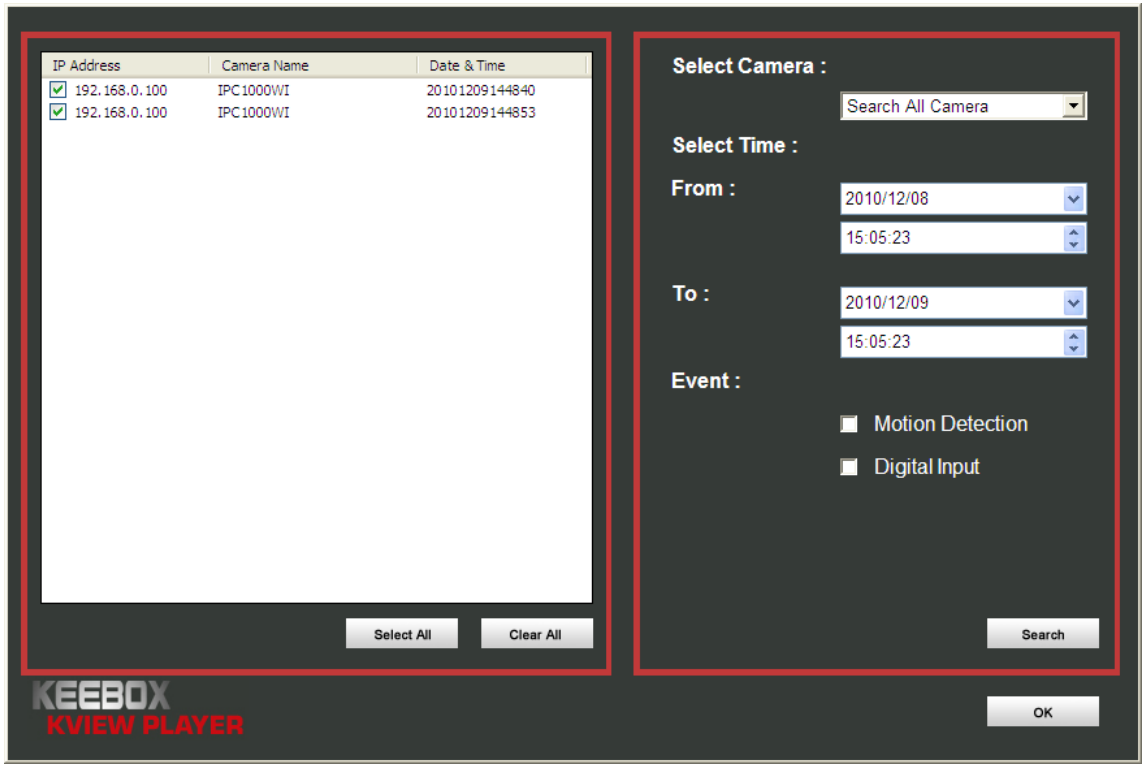


Number	Item	Description
1	Files List	A list of recorded files found in the recording folder appears here. Select a file from here and click the play button to view the recording.
2	Video Display Area	This area shows the video recording. At the bottom of the video is a progress bar .
3	Search and Delete Buttons	Use the search button to scan for more video files and delete to remove a video when you are done with it.
4	Playback Controls	Basic playback controls. Click the arrow buttons to go to the previous or next video in the list. You can also adjust the volume and playback speed.

Viewing Recorded Videos in KView Player

To view recorded video files in KView Player, it is first necessary to locate and select the files to be viewed and add them to the list. Click the **Search Files** button in the KView Player main interface and a new menu appears.

In the new menu, use the **Select Camera** pull-down menu to choose the video file folder of the camera to be reviewed. Use the **Select Time** menu to narrow the search to a specific time and date. Finally, the **Event** selection menu is used to further narrow the scope of the file search for videos triggered by **Motion Detection** or a **Digital Input** device. When the search criteria have been defined, click the **Search** button to place qualified files in the Search list.



Choose the files to be added to the view file list by checking the individual files or click the **Select All** button to check all files in the Search list, click **Add** to place the check marked files on the list of files for viewing.

After the files to be viewed have been chosen, click the **OK** button.

Now that the recorded video files have been selected and placed on the file list, they can be played and reviewed in the KViewPlayer . Use the standard playback controls to play, pause, slow down or speed up video files. Use the mouse and left click to grab the playback sliding progress indicator to move back and forth through the video.

Using the IPC1000W/IPC1000WI with a NAT Router

This section is designed to walk you through the setup process for installing your camera behind a router and enable remote video viewing.

Installing an IPC1000W/IPC1000WI Network Camera on your network is an easy 4–step procedure:

1. Assign a Local IP Address to Your Network Camera
2. View the Network Camera Using Your Internet Explorer Web Browser
3. Access the Router with Your Web Browser
4. Forward Ports to Enable Remote Image and Video Viewing

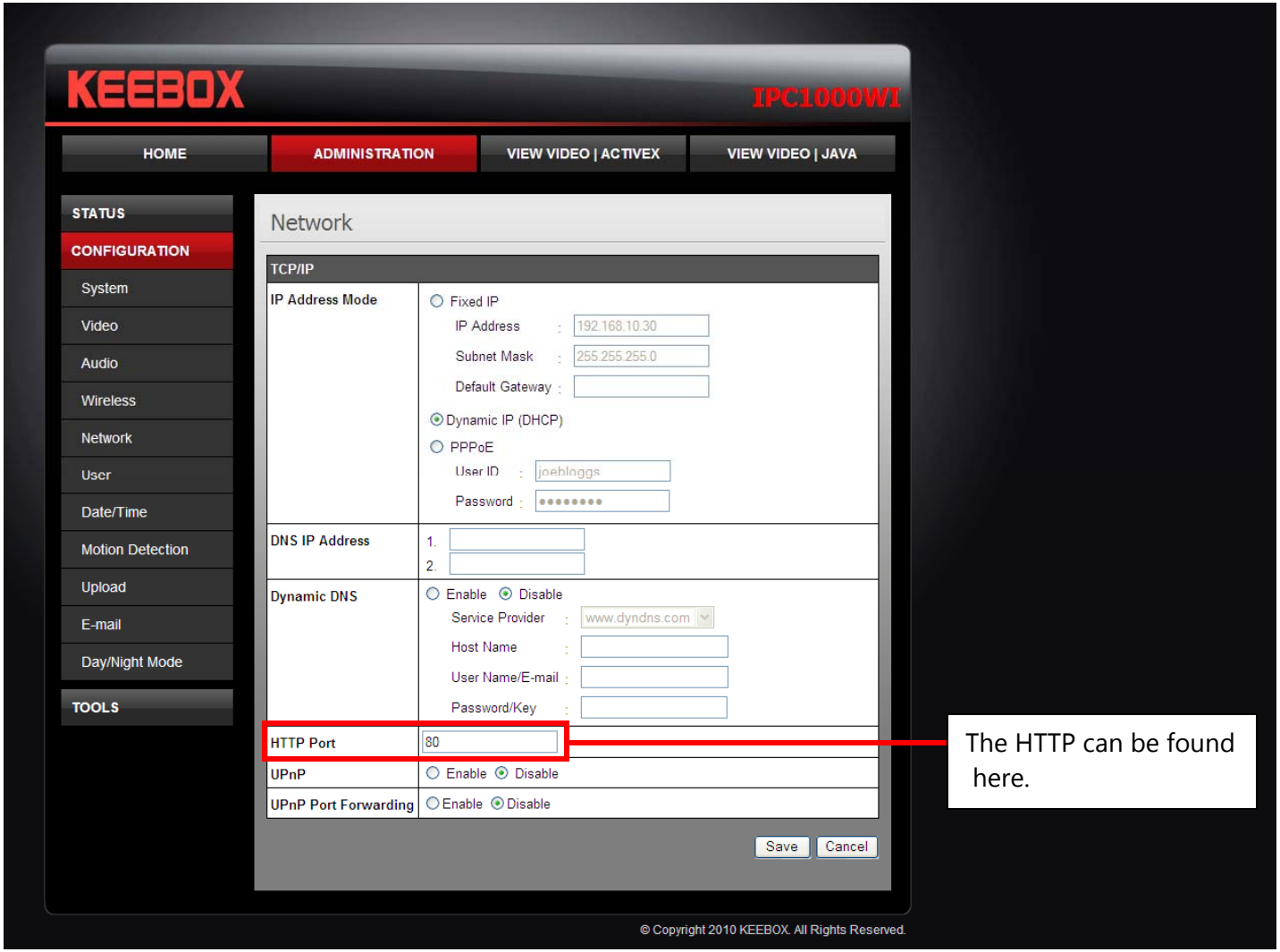
After you have completed the setup of the IPC1000W/IPC1000WI as outlined in the previous sections of this guide you will have an operating camera that has an assigned IP Address. Because you are using a router to share the Internet with one or more PCs, the IP Address assigned to the Network Camera will be a local IP Address. This allows viewing within your Local Area Network (LAN) until the router is configured to allow remote viewing of the camera over the Internet.

1. Assign a Local IP Address to Your Camera

Run the setup wizard from the CD included with the IPC1000W/IPC1000WI. The camera will be assigned a local IP Address that allows it to be recognized by the router. Write down this IP Address for future reference.

2. View the Network Camera Using Your Internet Explorer Web Browser

Open your web browser and in the address bar, type the IP Address that was assigned to the Network Camera by the Setup Wizard. The IPC1000W/IPC1000WI Home page appears with a window displaying a snapshot from the camera. You are able to view this screen from any PC using a web browser on your LAN. Click on **Network** on the left side of the display. Here you can see the HTTP port in use. By default, it is set to port 80. You can change this by going to **Configuration > Network**.



3. Access the Router with Your Web Browser

If you have cable or DSL Internet service, you will most likely have a dynamically assigned WAN IP Address. 'Dynamic' means that your router's WAN IP address can change from time to time depending on your ISP. A dynamic WAN IP Address identifies your router on the public network and allows it to access the Internet. To find out what your router's WAN IP Address is, go to the Status menu on your router and locate the WAN information for your router. The WAN IP Address will be listed. This will be the address that you will need to type in your Web browser to view your camera over the Internet.

Note: Because a dynamic WAN IP will change frequently, you may want to obtain a Static IP address from your ISP. A Static IP address is a fixed IP address that will not change over time and will be more convenient for you to use to access your camera from a remote location. The Static IP Address will also allow you to access your camera attached to your router over the Internet. Another solution to this is to use a Dynamic DNS service. Go to www.dyndns.com to find out more.

4. Forward Ports to Enable Remote Image and Video Viewing

Because you are using a router with Network Address Translation, when you enter your WAN IP address into a remote browser, it will not necessarily know how to route to your IP camera. Therefore, you need to forward the HTTP port to the local IP of the camera.

As each router varies in design, you will need to consult your router's user guide for instructions on how to forward the HTTP port to your camera.

Important: Some ISPs block access to port 80 and other commonly used Internet ports to conserve bandwidth. Check with your ISP so that you can open the appropriate ports accordingly. If your ISP does not pass traffic on port 80, you will need to change the port the camera uses from 80 to something else, such as 800. Not all routers are the same, so refer to your user manual for specific instructions on how to open ports.

Troubleshooting

1. **The Power LED and Ethernet Activity LED do not light up.**

The power supply or camera might be faulty. Check that the connection to both the power source and the terminal on the back of the camera are secure and that you are using the provided power supply. If the camera is otherwise functioning correctly, the LEDs might have been disabled in the configuration. See the section of this guide on Configuration of System settings.

2. **The camera can't be accessed or access is slow**

There might be a problem with the network cable. To confirm that the cables are working, ping the address of a known device on the network. If the cabling is OK and your network is reachable, you should receive a reply similar to the following (…bytes = 32 time = 2 ms).

Another possible problem may be that the network device such as a hub or switch utilized by the Network Camera is not functioning properly. Please confirm the power for the devices are well connected and functioning properly.

3. **The camera can be accessed locally but not remotely**

This might be caused by a firewall. Check the Internet firewall with your system administrator. The firewall may need to have some settings changed in order for the Network Camera to be accessible outside your local LAN. For more information, please refer to the section about installing your camera behind a router.

Make sure that the Network Camera isn't conflicting with any Web server you may have running on your network.

The default router setting might be a possible reason. Check that the configuration of the router settings allow the Network Camera to be accessed outside your local LAN.

4. **White vertical lines appear on the image from the camera**

It could be that the CMOS sensor (a square panel situated behind the lens that measures the light signals and changes it into a digital format so your computer can present it into an image that you are familiar with) has become overloaded when it has been exposed to bright lights such as direct exposure to sunlight or halogen lights. Reposition the Network Camera into a more shaded area immediately as prolonged exposure to bright lights will damage the CMOS sensor.

5. **The camera images are 'noisy'**

Often if the camera is in a low-light environment, the images can contain a lot of noise. Try enabling Night mode and see if that improves the image quality. Otherwise, try to use the camera in a location where there is a bit more light.

6. **The camera images are of poor quality.**

Make sure that your computer's display properties are set to at least 16-bit color. Using 16 or 256 colors on your computer will produce dithering artifacts in the image, making the image look as if it is of poor quality.

Try also adjusting the brightness, contrast, saturation, light frequency and anti-flicker controls on the Video Settings under the Configuration menu. You may also consider adjusting the resolution of the camera and the compression rate to improve the image.

7. **Video can't be viewed through the web browser interface.**

ActiveX might be disabled. If you are viewing the images from Internet Explorer make sure ActiveX has been enabled in the Internet Options menu. You may also need to change the security settings on your browser to allow the ActiveX plug-in to be installed.

If you are using Internet Explorer with a version number lower than 6, then you will need to upgrade your Web browser software in order to view the streaming video transmitted by the Network Camera. Try also viewing the video using Java. Ensure that you have the latest version of Java installed before you do. Go to www.java.com for more information.

Technical Specifications

Camera	
General	Sensor: VGA color CMOS Sensor Board lens Focal Length: 3.15mm F/No: F2.8 Focus Depth: 20cm ~ infinity Minimum illumination: 0 lux View: Horizontal: 45.3 degrees Vertical: 34.5 degrees Diagonal: 54.9 degrees Built in IR-Cut module (IPC1000WI only)
IR sensor	IR sensor activates on/off at 10 lux (± 5 lux) (IPC1000WI only)
Audio	Built-in omni-directional microphone Sensitivity: -40dB +/- 4dB (5 meters max.) Frequency: 20~20000Hz S/N: >58dB Codec: PCM

Image & Video	Compression: MJPEG White Balance: Auto Frequency: 50/60Hz Resolution: 640 x 480 and 320 x 240, 160 x 120
Zoom	4x digital zoom
Hardware	
Network	IEEE 802.3u 10/100Mbps Auto-MDIX Fast Ethernet
LED	Power, Link/Act, WPS
Reset Button	Reset to factory default
Power Consumption	4.6 Watts (max.)
Power	5V DC, 1.2A external power adapter
Dimension	70 x 108 x 27 mm (2.75 x 4.25 x 1.1 in.) IPC1000W 70 x 110 x 33 mm (2.75 x 4.3 x 1.3 in.) IPC1000WI
Temperature	Operating: 0°C ~ 40°C (32°F ~ 104°F) Storage: -15°C ~ 60°C (5°F ~ 140°F)
Humidity	Max. 90% (non-condensing)
Certifications	CE, FCC
Requirement	
To View Camera	Internet Explorer 7.0 and 8.0

To Run Software	Windows 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit)
KView	Channel: supports up to 32 cameras Record/Playback/Motion Detection/Audio
Network Protocols	IPv4, ARP, TCP, UDP, ICMP DHCP Client, NTP Client, DNS Client, DDNS Client, SMTP Client, FTP Client HTTP PPPoE UPnP
Wireless	
Standard	IEEE 802.11b, IEEE 802.11g Based on IEEE 802.11n Technology
Frequency	2.4 ~ 2.497 GHz ISM band
Modulation	DQPSK, DBPSK, DSSS and CCK OFDM: BPSK, QPSK, 16QAM, 64QAM
Antenna	Built-in printed antenna
Date Rate	802.11b: up to 11Mbps 802.11g: up to 54Mbps 802.11n: up to 150Mbps
Security	64/128-bit WEP, WPA/WPA2-PSK
Output Power	802.11b: 18dBm (typical)

	802.11g: 15dBm (typical) 802.11n: 15dBm ((typical)
Receiving Sensitivity	802.11b: -86dBm at 11Mbps 802.11g: -76dBm at 54Mbps 802.11n: -65dBm at 150Mbps
Channels	1~11 (FCC), 1~13(ETSI)
Management	
Accounts	Up to 64 user accounts
Remote Login	Remote management supported
Backup / Restore	Save/retrieve configuration files
Settings	
Image Control	Brightness, contrast, saturation, mirror (horizontal/vertical)
Video Setting	Encoding Type: MJPEG - Resolution: 640 x 480 (max. 20 fps), 320 x 240, 160 x 120 - Max. frame rate: VGA@20 fps, QVGA@30fps, QQVGQ@30fps
Recording	Recording type: motion detection, continuous, and scheduled (with complimentary software)
Snapshot	Event trigger, scheduled or always via email and/or upload to FTP
Port Settings	HTTP port: 80 (default)
Dynamic DNS	Yes
Time	Synchronize with NTP server or set time / date manually

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

EN 60950-1: 2006 +A11:2009

Safety of Information Technology Equipment

EN 62311: 2008

Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz-300 GHz)

(IEC 62311:2007 (Modified))

EN 300 328 V1.7.1: (2006-10)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 301 489-1 V1.8.1: (2008-04)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

EN 301 489-17 V2.1.1 (2009-05)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

Česky [Czech]	*Keebox* tímto prohlašuje, že tento IPC1000/IPC1000WI je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede *Keebox* erklærer herved, at følgende udstyr IPC1000/IPC1000WI overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
Deutsch [German]	Hiermit erklärt *Keebox* , dass sich das Gerät IPC1000/IPC1000WI in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab *Keebox* seadme IPC1000/IPC1000WI vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, *Keebox*, declares that this IPC1000/IPC1000WI is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente *Keebox* declara que el IPC1000/IPC1000WI cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ *Keebox* ΔΗΛΩΝΕΙ ΟΤΙ IPC1000/IPC1000WI ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ

[Greek]	1999/5/EK.
Français [French]	Par la présente *Keebox* déclare que l'appareil IPC1000/IPC1000WI est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente *Keebox* dichiara che questo IPC1000/IPC1000WI è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo *Keebox* deklarē, ka IPC1000/IPC1000WI atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo *Keebox* deklaruoja, kad šis IPC1000/IPC1000WI atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart *Keebox* dat het toestel IPC1000/IPC1000WI in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, *Keebox*, jiddikjara li dan IPC1000/IPC1000WI jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, *Keebox* nyilatkozom, hogy a IPC1000/IPC1000WI megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
Polski [Polish]	Niniejszym *Keebox* oświadcza, że IPC1000/IPC1000WI jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	*Keebox* declara que este IPC1000/IPC1000WI está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	*Keebox* izjavlja, da je ta IPC1000/IPC1000WI v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Slovensky [Slovak]	*Keebox* týmto vyhlasuje, že IPC1000/IPC1000WI spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	*Keebox* vakuuttaa täten että IPC1000/IPC1000WI tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar *Keebox* att denna IPC1000/IPC1000WI överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Limited Warranty

KEEBOX warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

IPC1000/IPC1000WI– 1 Year Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, KEEBOX shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of KEEBOX. Replacement products may be new or reconditioned. KEEBOX does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

KEEBOX shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to KEEBOX pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting KEEBOX within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all KEEBOX products. Products that are sent to KEEBOX for RMA service must have the RMA number marked on the outside of return packages and sent to KEEBOX prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

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